THE STRATEGIC IMPORTANCE OF REGIONAL ECONOMIC INTEGRATION TO MULTINATIONAL COMPANIES (MNCs):
A STUDY OF SOUTH AFRICAN MNCs' OPERATIONS IN THE SADC

by

MATHEW ELEOJO EGU
Student Number: 46242597

Dissertation submitted in fulfilment of the requirements for the degree of

MASTER OF ADMINISTRATION
in the subject
BUSINESS MANAGEMENT
(INTERNATIONAL BUSINESS)

at the
UNIVERSITY OF SOUTH AFRICA
SUPERVISOR: MR. AREGBESOLA RAFIU ADEWALE

July 2014
ACKNOWLEDGEMENTS

The journey to completing this dissertation was one filled with many twists and turns. There were times of absolute excitement and there were times when I was on the brink of giving up. Despite all that, this dissertation is now complete, due to a number of incredibly supportive and patient people to whom I am greatly indebted.

First and foremost, I would particularly like to thank Aregbeshola Rafiu Adewale, my supervisor, who worked closely with me and painstakingly compiled relevant information that made this study successful. Thank you for being so flexible about your hours and most especially for your eternal understanding and sense of purpose.

Thank you Dr. Charl Schutte for your professional English language editing and proofreading. All your comments and notes were of great help. Likewise, the contribution of the Personal librarian of the Department of Business Management, Ms. Margarette van Zyl, who took pains to extract the vast statistical data relating to this research, is highly appreciated.

Also, I would like to thank the management of the Financial Aid Bureau (UNISA) for the bursary award given to me.

Last but not the least; I would like to thank my family and friends for all their support and advice.

May God bless you all.
DECLARATION OF ORIGINALITY

I, Mathew Eleojo Egu, declare that the dissertation, The Strategic Importance of Regional Economic Integration to Multinational Companies (MNCs): a Study of South African MNCs’ Operations in the SADC, hereby submitted for the Degree of Master of Administration: Business Management at the University of South Africa, is my own, independent work and has not previously been submitted at another university or faculty. All the sources that I have used have been duly specified and acknowledged by means of complete referencing. I furthermore cede copyright of the dissertation in favour of the University of South Africa.

Egu M.E
July, 2014
ABSTRACT

Though the strategic importance of regional economic integration to multinational companies (MNC) has been researched extensively internationally, this concept has not been studied in South Africa. In fact, there is a growing nostalgia that with the South African Development Community (SADC) moving towards its set macroeconomic convergence targets; regional economic integration eventually leads to macroeconomic stabilisation. This ultimately becomes the root of growth in a region that has been severely affected by globalisation, financial crises, increasing government debt and budget deficit problems. This study, hence, tries to find out how the critical decisions of South African MNCs are made when operating within regional markets. Consequently, statistical econometric models were developed to test time-series data from 1980-2011 using the best (most efficient) linear unbiased estimator (BLUE) ordinary least square regression technique.

An analysis was then done to investigate how South African firms have been able to gain maximum benefits by adopting the SADC as its major trading bloc in Africa. The study’s findings showed that the major barriers that impede MNCs of South African origin from penetrating these markets were custom duties, direct and indirect tariffs. It was observed that this would only be reduced by regional integration.

Determined to critically interrogate the problems detailed in this research, three hypotheses were tested, analysed and subsequent interpretation of the findings revealed that South African MNCs contribute positively to regional economic growth and investment in the SADC. Furthermore, the study found out that although these factors were important, they were not the only variables that stimulated the competitiveness of South African MNCs in the SADC region. The literature review sections of this study found that the adoption of strategic management initiatives by MNCs improved the operation of transnational companies in South Africa. A comparison between the value of South African MNCs, as well as, other explanatory variables, and the Gross Domestic Product (GDP) of both South Africa and the SADC using time series data for the period 1980-2011 indicated that there was a positive relationship between the contribution of MNCs to South Africa’s economy and the GDP of both South Africa and the SADC. This proved that there is a significant link between MNC growth and national/regional productivity.

In conclusion, the study established that the findings of the literature review were theoretically in sync with the empirical analysis. Also, the outcome of this study concurred with the findings of similar research. In essence, regional trade arrangements are an increasingly important element of the global trade environment, of which the move by South Africa’s MNCs to operate in the SADC market was a positive one. Finally, the study found out that for these firms to be successful in the international business arena, business management decisions need to be made, only after a detailed strategic analysis of the significance of regional economic integration is considered. This integrative framework certainly determines the operational efficiency, survival and profitability of most MNCs that operate within the region.
KEYWORDS

Multinational Companies, South Africa Development Community (SADC), Foreign Direct Investment, Strategic Management, Macroeconomic convergence, Macroeconomic Stability, Regional Trade Agreements, Mergers and Acquisitions, Regional Economic Community
**Table of Contents**

Contents                                                                                                              Page
Acknowledgements ........................................................................................................................................................................ ii
Declaration of Originality .................................................................................................................................................................. iii
Abstract ........................................................................................................................................................................................................ iv
Keywords ..................................................................................................................................................................................................... v
Abbreviations .................................................................................................................................................................................. x
List of Figures ................................................................................................................................................................................................ xi
List of Tables .................................................................................................................................................................................................. xii
Appendix ....................................................................................................................................................................................................... xiii

CHAPTER ONE
Introduction and Background to the Study ................................................................................................................................. 1
1.1 Introduction ....................................................................................................................................................................................... 1
1.2 Motivation for the Study ................................................................................................................................................................. 3
1.3 Preliminary Literature Review .................................................................................................................................................... 4
1.4 Research Objectives ................................................................................................................................................................. 6
1.5 Research Question/Hypothesis ................................................................................................................................................ 6
1.6 Research Design .......................................................................................................................................................................... 7
1.7 The Plan of the Dissertation ................................................................................................................................................... 8

CHAPTER TWO
The Theoretical Framework, Practice and Concepts of Multinational Corporations (MNCs) .......................................................... 9
2.1 Introduction .................................................................................................................................................................................. 9
2.2 Historical Overview of MNCs ................................................................................................................................................... 9
2.3 The Role of MNCs in South Africa ........................................................................................................................................ 11
2.4 Globalisation and Transnational Corporations ..................................................................................................................... 21
2.5 Contribution of South African Multinationals to the Growth of the SADC Zone ................................................................. 23
2.6 Theoretical Framework of MNCs ........................................................................................................................................ 30
  2.6.1 Theories of Multinational Enterprises (MNEs) ................................................................................................................. 33
    2.6.1.1 Trade Theories .............................................................................................................................................................. 34
    2.6.1.2 Industrial Organisation Theories .................................................................................................................................. 35
    2.6.1.3 Transaction Cost/Internationalisation Theories ......................................................................................................... 36
    2.6.1.3.1 Know-How ............................................................................................................................................................ 37
    2.6.1.3.2 Reputation ............................................................................................................................................................ 37
    2.6.1.3.3 Raw Materials and Components ........................................................................................................................ 37
    2.6.1.3.4 Distribution and Marketing .................................................................................................................................. 37
    2.6.1.3.5 Financial Capital .................................................................................................................................................... 37
  2.6.2 Theories of Foreign Direct Investment (FDI) ....................................................................................................................... 38
2.6.2.1 Monopolistic Advantage Theory ....................................................... 38
2.6.2.2 Product Life Cycle ............................................................................ 39
2.6.2.3 Theory of Comparative Advantage ................................................... 40
2.6.2.4 Internationalisation of Market Theory ............................................... 41
2.6.2.5 International Product Eclectic Theory (IPET) .................................... 41
2.6.2.6 New Generation FDI theory ............................................................. 41
2.7 The Concept of MNCs ............................................................................ 42
2.8 The Growth of MNCs ............................................................................. 42
2.9 Importance of MNCs ............................................................................. 44
2.10 MNC Activities in Various Sectors of the Economy ............................... 45
2.11 The Current Level of Investment by MNCs in the SADC ....................... 46
2.12 Multinationalising a Common Currency Accession in the SADC .......... 48
2.13 Chapter Summary ................................................................................. 51

CHAPTER THREE

The dynamics of economic integration in the SADC ............................... 52
3.1 Introduction ............................................................................................ 52
3.2 History of SADC .................................................................................... 52
3.3 Theoretical framework of economic integration ....................................... 54
  3.3.1 Levels of economic integration .......................................................... 56
    3.3.1.1 Free Trade Area ........................................................................... 56
    3.3.1.2 Customs Union ........................................................................... 57
    3.3.1.3 Common Market ........................................................................ 57
    3.3.1.4 Economic Union ....................................................................... 57
    3.3.1.5 Political Union .......................................................................... 57
  3.3.2 The Importance of Economic Integration ............................................ 58
3.4 Challenges Facing the Implementation of Economic Integration in the SADC ... 62
3.5 Balancing the Framework for Foreign Direct Investment (FDI) ............... 68
3.6 SADC Regional Integration Agenda ....................................................... 78
3.7 The Economic Advantage of SADC over Competing Nations ............... 81
3.8 Strategic Challenges for Multinational Companies in an Integrated SADC ... 84
3.9 Chapter Summary ................................................................................. 87

CHAPTER FOUR

Research Methodology ............................................................................. 88
4.1 Introduction ............................................................................................ 88
4.2 Research Design .................................................................................... 89
4.3 Population and Sampling ....................................................................... 89
  4.3.1 Description of the Population and Sampling ....................................... 89
  4.3.2 Research Population ........................................................................ 90
4.4 Types and Sources of Data ..................................................................... 90
4.5 Data Analysis and Processing .................................................................. 90
  4.5.1 Unit Root Test .................................................................................. 91
  4.5.2 Cointegration Test ........................................................................... 91
  4.5.3 Econometrics Estimation Model ......................................................... 92
  4.5.4 Measurement of Causation ............................................................... 95
  4.5.5 Econometrics Estimation Models Assumption .................................... 96
    4.5.5.1 Research Hypothesis 1 ............................................................... 99
CHAPTER FIVE

Data Analysis and Interpretation ..............................................................109

5.1 Introduction .............................................................................................. 109

5.2 Types of Data and the Method of Analysis ................................................. 109

5.3 Presentation of Results .............................................................................. 109

5.3.1 Unit Root Test ...................................................................................... 109

5.3.2 Cointegration Test .................................................................................. 111

5.4 Test of Hypotheses .................................................................................... 115

5.4.1 Test of Hypothesis 1 .............................................................................. 115

5.4.1.1 Regression Analysis ........................................................................ 115

5.4.1.2 Relationship Testing for Hypothesis 1 .............................................. 117

5.4.2 Test of Hypothesis 2 .............................................................................. 121

5.4.2.1 Regression Analysis ........................................................................ 121

5.4.2.2 Relationship Testing for Hypothesis 2 .............................................. 123

5.4.3 Test of Hypothesis 3 .............................................................................. 127

5.4.3.1 Regression Analysis ........................................................................ 127

5.4.3.2 Relationship Testing for Hypothesis 3 .............................................. 129

5.5 Interpretation of Findings .......................................................................... 135

CHAPTER SIX

Summary of Findings, Recommendations and Conclusion ......................137

6.1 Introduction ............................................................................................... 137

6.2 Findings of the Research ................................................................. 137

6.2.1 The Theoretical Research .................................................................... 137

6.2.2 The Empirical Research ....................................................................... 138

6.2.3 Inference .............................................................................................. 139

6.2.4 The Findings of the Unit Root Test .................................................... 139

6.2.5 The Findings of the Cointegration Test .............................................. 139

6.2.6 The Findings of the Regression Analysis ............................................ 140

6.2.7 The Findings of the Pairwise Granger Causality Tests ....................... 140

6.2.8 Implication ........................................................................................... 141

6.3 Overall Summary .................................................................................... 141

6.4 Recommendations .................................................................................. 142

6.5 Conclusion ............................................................................................... 144
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGOA</td>
<td>African Growth and Opportunity Act</td>
</tr>
<tr>
<td>ASGISA</td>
<td>Accelerated &amp; Shared Growth Initiative for South Africa</td>
</tr>
<tr>
<td>BBBEE</td>
<td>Broad Based Black Economic Empowerment</td>
</tr>
<tr>
<td>BEE</td>
<td>Black Economic Empowerment</td>
</tr>
<tr>
<td>BRICS</td>
<td>Brazil, Russia, India, China and South Africa</td>
</tr>
<tr>
<td>EMU</td>
<td>European Monetary Union</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GEAR</td>
<td>Growth, Employment and Redistribution</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>LDC</td>
<td>Less Developed Countries</td>
</tr>
<tr>
<td>MDAs</td>
<td>Ministries, Departments and Agencies</td>
</tr>
<tr>
<td>MNC</td>
<td>Multinational Company</td>
</tr>
<tr>
<td>MNE</td>
<td>Multinational Enterprise</td>
</tr>
<tr>
<td>NEPAD</td>
<td>New Partnership for African Development</td>
</tr>
<tr>
<td>NSDS3</td>
<td>National Skills Development Strategy III</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PTA</td>
<td>Preferential Trading Arrangement</td>
</tr>
<tr>
<td>RISDP</td>
<td>Regional Indicative Strategic Development Plan</td>
</tr>
<tr>
<td>RTA</td>
<td>Regional Trade Agreements</td>
</tr>
<tr>
<td>SADC</td>
<td>Southern African Development Community</td>
</tr>
<tr>
<td>SARB</td>
<td>South African Reserve Bank</td>
</tr>
<tr>
<td>SARPN</td>
<td>Southern African Regional Poverty Network</td>
</tr>
<tr>
<td>SETA</td>
<td>Sector Education and Training Authorities</td>
</tr>
<tr>
<td>TNC</td>
<td>Transnational Corporations</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organisation</td>
</tr>
<tr>
<td>Figure</td>
<td>Description</td>
</tr>
<tr>
<td>--------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Figure 2.1 The Six Gaps</td>
</tr>
<tr>
<td>2.</td>
<td>Figure 2.2 South African current account 1953-2007 – millions US $</td>
</tr>
<tr>
<td>3.</td>
<td>Figure 2.3 International Product Life Cycle</td>
</tr>
<tr>
<td>4.</td>
<td>Figure 2.4 The Growth of MNCs</td>
</tr>
<tr>
<td>5.</td>
<td>Figure 3.1 Map of the SADC</td>
</tr>
<tr>
<td>6.</td>
<td>Figure 3.2 Levels of Economic Integration – the Geography of Transport Systems</td>
</tr>
<tr>
<td>7.</td>
<td>Figure 3.3 FDI Inflows and Outflows by Regions in Africa 2000-2009</td>
</tr>
<tr>
<td>8.</td>
<td>Figure 3.4 Intra-SADC Trade Flows by Country</td>
</tr>
<tr>
<td>9.</td>
<td>Figure 3.5 SADC and South Africa’s GDP in Billions of Rands 1980-2011</td>
</tr>
<tr>
<td>10.</td>
<td>Figure 5.1 Scatter Single Graph, First vs. All with fitted Regression Line, and Multiple Series Axis Borders Kernel Density for Hypothesis 1</td>
</tr>
<tr>
<td>11.</td>
<td>Figure 5.2 Residuals Graph for Hypothesis 1</td>
</tr>
<tr>
<td>12.</td>
<td>Figure 5.3 Histogram Normality Test for Hypothesis 1</td>
</tr>
<tr>
<td>13.</td>
<td>Figure 5.4 Scatter Single Graph, First vs. All with fitted Regression Line, and Multiple Series Axis Borders Kernel Density for Hypothesis 2</td>
</tr>
<tr>
<td>14.</td>
<td>Figure 5.5 Residuals Graph for Hypothesis 2</td>
</tr>
<tr>
<td>15.</td>
<td>Figure 5.6 Histogram Normality Test for Hypothesis 2</td>
</tr>
<tr>
<td>16.</td>
<td>Figure 5.7 Scatter Single Graph, First vs. All with fitted Regression Line, and Multiple Series Axis Borders Kernel Density for Hypothesis 3</td>
</tr>
<tr>
<td>17.</td>
<td>Figure 5.8 Residuals Graph for Hypothesis 3</td>
</tr>
<tr>
<td>18.</td>
<td>Figure 5.9 Histogram Normality Test for Hypothesis 3</td>
</tr>
<tr>
<td>19.</td>
<td>Figure 6.1 A comparison of the JSE Market Cap, JSE Group Revenue and South Africa’s GDP from 2000-2011 in Trillion Rands</td>
</tr>
<tr>
<td>Table Number</td>
<td>Table Title</td>
</tr>
<tr>
<td>--------------</td>
<td>------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>1.</td>
<td>Table 2.1 Macroeconomic Convergence Targets</td>
</tr>
<tr>
<td>2.</td>
<td>Table 2.2 The Equity Funding, Loans, Smelter Cost and Shareholding in the Moza</td>
</tr>
<tr>
<td>3.</td>
<td>Table 2.3 South African Companies Classified by Industry Operating in the SADC Zone</td>
</tr>
<tr>
<td>4.</td>
<td>Table 2.4 FDI Inflows in SADC 2000-2012 - Million US $</td>
</tr>
<tr>
<td>5.</td>
<td>Table 2.5 FDI Outflows in SADC 2000-2012 - Million US $</td>
</tr>
<tr>
<td>6.</td>
<td>Table 3.1 Sectoral Composition of the Stock of FDI Liabilities</td>
</tr>
<tr>
<td>7.</td>
<td>Table 3.2 Outward Direct Investment from South Africa</td>
</tr>
<tr>
<td>8.</td>
<td>Table 3.3 Macroeconomic Convergence Targets</td>
</tr>
<tr>
<td>9.</td>
<td>Table 3.4 Performance of SADC Member States in Relation to 2008 Convergence Criteria</td>
</tr>
<tr>
<td>10.</td>
<td>Table 5.1 Unit Root Test for Hypothesis 1</td>
</tr>
<tr>
<td>11.</td>
<td>Table 5.2 Unit Root Test for Hypothesis 2</td>
</tr>
<tr>
<td>12.</td>
<td>Table 5.3 Unit Root Test for Hypothesis 3</td>
</tr>
<tr>
<td>13.</td>
<td>Table 5.4 Cointegration Test for Hypothesis 1</td>
</tr>
<tr>
<td>14.</td>
<td>Table 5.5 Cointegration Test for Hypothesis 2</td>
</tr>
<tr>
<td>15.</td>
<td>Table 5.6 Cointegration Test for Hypothesis 3</td>
</tr>
<tr>
<td>16.</td>
<td>Table 5.7 Least Squares Regression Analysis Output Table for Hypothesis 1</td>
</tr>
<tr>
<td>17.</td>
<td>Table 5.8 Residuals Diagnostics Test for Hypothesis 1</td>
</tr>
<tr>
<td>18.</td>
<td>Table 5.9 Pairwise Granger Causality Tests for Hypothesis 1</td>
</tr>
<tr>
<td>19.</td>
<td>Table 5.10 Least Squares Regression Analysis Output Table for Hypothesis 2</td>
</tr>
<tr>
<td>20.</td>
<td>Table 5.11 Residuals Diagnostics Test for Hypothesis 2</td>
</tr>
<tr>
<td>21.</td>
<td>Table 5.12 Pairwise Granger Causality Tests for Hypothesis 2</td>
</tr>
<tr>
<td>22.</td>
<td>Table 5.13 Least Squares Regression Analysis Output Table for Hypothesis 3</td>
</tr>
<tr>
<td>23.</td>
<td>Table 5.14 Residuals Diagnostics Test for Hypothesis 3</td>
</tr>
<tr>
<td>24.</td>
<td>Table 5.15 Pairwise Granger Causality Tests for Hypothesis 3</td>
</tr>
</tbody>
</table>
### APPENDIX

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. First Difference Line and Pie Graph for Hypothesis 1</td>
<td>208</td>
</tr>
<tr>
<td>2. First Difference Line and Pie Graph for Hypothesis 2</td>
<td>209</td>
</tr>
<tr>
<td>3. First Difference Line and Pie Graph for Hypothesis 3</td>
<td>210</td>
</tr>
<tr>
<td>4. The SADC Key Ranking Data</td>
<td>211</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 Introduction

South Africa is the most advanced economy in the south of Africa - contributing nearly 70 per cent of the Southern African Development Community (SADC) combined gross domestic product (GDP) of US $ 662.7 billion (Export-Import Bank of India, 2012; United Nations Economic Commission for Africa, 2013). This nation has many first world features including a sophisticated financial and physical infrastructure, an excellent telecommunications system, as well as, a vibrant energy supply network and a stock exchange that ranks among the top ten in the world. Similarly, the country is both the home and the host of the largest multinational companies in Africa (World Economic Forum, 2013). However, notwithstanding all positive pointers of this economy, the South African state is surrounded by small and underdeveloped countries. As a result of this problem, the republic of South Africa in partnership with other SADC states continue to pursue an aggressive regional economic integration agenda in order to boost regional development, cooperation and common advancement which are necessary elements in the building of a new economic frontier.

There are a number of studies on the strategic importance of regional economic integration to MNCs (see e.g. Mthombeni, 2006; Pradhan, 2010; Hunya, 2012; Acquaah, Zoogah and Kwesiga, 2013). These contributions strongly (and sometimes exclusively) emphasise the potential merits of regional economic integration to MNCs resulting from economies of scale; increased mobility of labour; increased competition and innovation; expanded opportunities for risk diversification; etc. These assumed benefits are predominantly based on theoretical arguments that are habitually made both in the debate on globalisation and regional economic integration (see e.g. Frey and Volz, 2011; Bala, 2012; World Bank, 2012; SADC, 2012; OECD, 2013). The key assertion in the literature is that regional economic integration is beneficial to MNCs since it entails market expansion, as well as, economic growth. However, the empirical evidence is lacking in most of these studies. Moreover, SADC Statistical Yearbook (2014) indicates that although the 2012 MNC’s FDI inflow figure of US$ 12.3 billion appears to rise, it is still below the pre global economic crises level of US$ 18.1 billion, which necessitates the need for further study, in order to probe the impact of this phenomenon in the SADC. Consequently, this research attempts to fill this particular void in the extant body of the literature.

Against this backdrop, the aim of this study is to critically review the arguments made in the literature and examine whether measurable effects of regional economic integration on South African MNCs exist. This was achieved in this study by measuring the relationship between these variables and the levels of economic growth and investment in both South Africa and the SADC. And also, by determining whether the regulatory environment of SADC countries hinders the operation of South African MNCs that operate within the region. As expected, the policy lesson and contribution drawn from the conclusion of this study was that the strategic importance of regional economic integration to South African MNC’s operating within
the SADC is very significant in the attainment of the growth objectives of both the SADC region and South Africa.

Within the ambit of this research, it is considered essential to study the **strategic importance of regional economic integration to South African multinational corporations (MNCs) operating in the SADC**, because these companies are largely the carriers of foreign direct investment (FDI), which has been identified as the major growth driver in economies across the world (Ashegian, 2004; Hatch, Becker and Zyl, 2011; Dhar, 2011). Although the study of multinational corporations (MNCs) has been a fundamental component of international business literature (Collings, 2008; Lam, 2008; Ferreira, 2011; Hatch, Becker and Zyl, 2011), most studies have focused on the international expansion of MNCs from the Western viewpoint, and very few academic studies have been conducted to examine and analyse the internationalisation strategies and characteristics of South African MNCs operating within the SADC region. Notwithstanding the relative youthfulness of these firms in the international market, several South African MNCs are now global corporations and their influence transcend beyond their borders (Preuss, 2012), as such, deserve to be studied meticulously.

Studies carried out by Karlsson (2008) and Grossman and Rossi-Hansberg (2010) suggest that the localisation of industries leads to economies of scale. While this phenomenon applies to the wide operation of companies, on a larger scale, regional integration (OECD, 2008) allows MNCs to expand, exploiting this advantage within an international frontier that is closer to the home country. Similarly, Figueiredo, Guimaraes and Woodward (2009) assert that development would diffuse to the neighbouring states in a regional pattern and therefore, it is expected that within years SADC countries should become middle-income countries like South Africa. Karlsson (2008) went on to state that functional regions like the SADC have low intra-regional transaction and transportation costs and have access to the local labour market and therefore support an agglomeration of economic activities within the regional grouping.

Despite the fact that Africa is the poorest continent (Economic Commission for Africa, 2011), many enterprising companies have recognised the huge, untapped potential of Africa, especially the SADC region, and are actively pursuing business ventures across the continent. It has been observed in studies stated earlier that these MNCs make significant contributions to the economies of their host countries. As such, the aim of this study is to determine the contribution of South Africa’s MNCs to both South Africa and the SADC. As well as, clearly point out whether the regulatory environment of SADC countries hinders the operation of South African MNCs within the region.

A possible solution to this problem is for MNCs to select an appropriate entry mode and expansion strategy for a particular foreign market due to a shrinking demand in the local market. When an MNC seeks to enter a foreign country, it must choose the most appropriate entry mode for that specific market, such as exporting, licensing, a turnkey project, franchising, joint ventures or wholly-owned subsidiaries. Many factors affect a company’s decision on entry modes, depending on the market structure, industry and the number of competitors in a particular country (Santamaria and Ni, 2008). Influential factors contributing to the entry mode decision can have
different degrees of impact for each particular country (Laisi, 2009). As a consequence, an MNC has to use different entry modes in order to adapt to the specific situations it faces in its international expansion strategy. The long-term implication of these barriers for South African MNCs operating within the SADC has necessitated the researcher to probe this phenomenon.

The importance of regional integration to South African MNCs operating within the SADC is well documented in literature. As indicated by Chipeta (2006), and Burgess (2009) part of the gain is that it can be a key force for sustainable development, as it promotes faster economic growth, achieves and maintains macroeconomic stability in the region, reduces poverty and fosters social development. Moreover, it is observed by some authors that MNCs largely contribute to bringing in scarce capital; generate exports and substitute for imports; contribute to local taxes; enhance local skills by training labour; create jobs; promote competitive markets; encourage technology transfer and generate opportunities for local entrepreneurs from the development of ancillary trade and industry (Cohen, 2007; Lin and Chiang, 2011; House of Commons, 2012).

It is, therefore, imperative to assess the current operations of the South African MNCs in terms of their operations in the SADC. This analysis is aimed at improving the link between the strategic importance of regional integration and South African MNCs operation in the SADC and, possibly, fill the identified gaps in this field of study.

1.2 Motivation for the Study

Arising from concerns over the state of economic development in the SADC, and especially South Africa, it was decided by the researcher to probe the reasons why most South African multinational companies have not invested substantially in the SADC region. Although the member states that make up the SADC appear to pursue a regional economic integration agenda, many obstacles have continued to pose serious challenges to companies that are willing to operate in this zone.

It is observed that the conceptual study of the multinational company phenomenon in the SADC is still in its relative infancy (Mthombeni, 2006; Gathii, 2009; Pouris and Ho, 2014). Despite the success of South African MNCs in the SADC region, there appears to be a major weakness in attracting these companies to sustainably embark on large-scale operations in these countries. A few studies that focus on these challenges reveal that the regulatory practice of these countries, particularly with regard to the imposition of custom duties, direct and indirect tariffs on South African MNCs operating within their country is responsible for low investment levels (Bhagwati, 2007; Chigunta, 2007; UNCTAD, 2008; World Bank, 2012; PWC, 2013).

The main motivation for this study is to provide answers to how the interactions of South Africa’s MNCs can further integrate the SADC region. Arising from concerns over the state of MNC development in the region, it is considered necessary to probe the reasons why South African MNCs continue to operate at a low key in these areas. Previous findings suggest regional strategies have become increasingly important as firms internationalise in an attempt to cut costs and benefit from economies of scale (Birkinshaw et al. 2006; Ghemawat, 2008; Heinecke, 2011).
1.3 Preliminary Literature Review

Many literature studies support the notion that the increasing level of regional economic integration is strategically important to South African MNCs operating within the SADC (see Mthombeni, 2006; Balaam and Veseth, 2008; Chanmongkolpanich and Panthong, 2009; Banner and Papathanakos, 2014). Empirical research shows that MNCs’ offshore operations, facilitated through FDI, influence the economy of a host country positively, as it provides needed capital, technology and augments the skill sets of the host nation (Aregbeshola, 2008). In a survey carried out to identify the main reasons for the failure of businesses in SADC countries, it was observed that huge budget deficits, political instability, lack of access to finance, corruption and lack of human capital were identified as the main reasons for business bankruptcy (UNCTAD, 2011). On the contrary, rapid technological changes in production have improved the efficiency of South African MNCs, necessitating the need to distribute surplus products more widely and quickly to neighbouring SADC countries (ANSA, 2006; Esterhuizen, 2006; Nwanna, 2006; Vilakazi, 2009).

A few of the recent studies suggest that if South African companies are to compete successfully in the global marketplace, it then becomes important for these firms to be involved in the globalisation process as soon as possible, and also, develop strategic alliances as a means of becoming internationalised (Mthombeni, 2006; Dunning and Gugler, 2008; Watts, 2008; Laanti, 2009). Furthermore, geographical proximity has made South Africa the gateway for doing business in Southern Africa, and ultimately places on South African companies the prospect of taking full advantage of all emerging opportunities (Meyer and Tran, 2006; Laisi, 2009; Boateng, 2014). Nevertheless, South African investors are yet to capture the full potentials of such opportunities due to poor homework assessment and management risk aversion which could be remedied by basing entry on solid market research, analysis of competition, and strategic risk assessment (Mushuku, 2006). As a result, many ambitious companies have opened plants, factories, as well as, sales and marketing offices, or are arranging do so in order to penetrate the Southern African market both efficiently and effectively (Deresky, 2013).

For the purpose of this research, multinational companies, enterprises or transnational companies can be defined as a corporation that has its facilities and other assets in at least one country other than its home country (Susman, 2007; Sugden, 2013). Such companies have offices and/or factories in different countries and usually have a centralised head office where they co-ordinate global management. It has been observed that very large multinationals companies (MNCs) have budgets that exceed those of many small countries, thus yielding both firm and country specific advantages in the process (Balaam and Veseth, 2008; Belyaeva, 2012).

Seen from a macro-economic perspective, multinational corporations play a key role in economic growth by adding to the pool of capital available for investment on a global basis. Similarly, South African multinational companies are one of the largest investors in Africa and they have contributed $1.4 billion per annum between 1994 and 2004 to Africa’s GDP (Michael, 2006:6; Valsamakis, 2012). This trend has triggered academic debates and research to study this phenomenon. The United
Nations Conference on Trade and Development (UNCTAD) estimates that at least 77,000 MNCs with about 770,000 foreign affiliates, representing an FDI stock of $7 trillion, control two-thirds of global trade in goods and services and generate 53 million jobs (UNCTAD, 2009). According to Spero and Hart (2003:132), many empirical studies have demonstrated that a positive relationship exists between increases in FDI flows and economic growth rates in these countries. It therefore portends that investments by South African MNCs improves the economy of SADC countries, and provides a formidable frontier to compete in the global market. Neoliberal theory argues that less developed countries (LDCs) typically suffer from the four "gaps" which keep these countries trapped in a state of economic backwardness (Mthombeni, 2006). Specifically, these include the resource gap; foreign exchange gap; skills and technology gap; and the budgetary gap.

Accordingly, the Neoliberal School of Thought maintains that by filling these gaps, LCDs are able to generate economic growth and development, and so escape the "poverty trap". Usually to many Neo-Classical Theorists, a solution involves foreign investment (Paterson, 2006; Madyo, 2008). Thus, MNCs as the main carriers of foreign direct investment (FDI) and as a "package" of financial, managerial and technological resources, constitute one of the most effective means available to fill the four gaps experienced by LDCs (Fontelles, 2009; Cornelisse and Thorbecke, 2010; Singh, 2011). Mthombeni (2006) further observes that in line with the above, Neoliberal writers reason that, in order to promote domestic economic growth and development, LDC governments should encourage investment by MNCs through the adoption of "appropriate" economic policies.

The studies of Ennis and Malek (2005) and Fernholz (2009) suggest that global depression has made most MNCs adopt a fundamental strategy of thinking globally and acting locally. Although South African MNCs have adopted a critical mass, they face enormous challenges when it has to do with the sales and marketing of products. Due to the underdevelopment of neighbouring SADC states, strict restrictions have been placed on the importation of goods from South Africa. Customs duties, direct and indirect tariffs pose serious obstacles that act as barriers to entry for these MNCs willing to operate in the SADC (Wu, Song and Zeng, 2008; Lamprecht, 2009; Chauffour, 2012; Sandrey, 2013). However, the timely implementation of an SADC regional integration agenda has continued to lessen these burdens on South African firms, albeit very gradual.

In support of the statement above Mthombeni (2006) argues that regional integration has stimulated economic growth in the region, as a result of the South African MNCs tapping into the enormous potential of local resource endowments in these countries, which has a sizable market demand for manufactured products. For example, Sasol, AngloGold Ashanti, Implats and SAB Miller have been able to improve efficiency and profitability due to strong brands and value management. According to Mackay (2005) SAB Miller has developed a continuum of business from emerging to mature, by exploiting regional markets, enabling the company to benefit from value and volume.

Foreign market entries are important stepping stones to expand their global reach and establish an international network of interdependent business units. Within this network, each subsidiary has a specific role, for instance to provide access to local
resources or markets. The design of an entry strategy thus has to match the needs and resources of the multinational enterprise (MNE) with the opportunities and constraints in the local environment (Meyer, Estrin, Bhaumik and Peng, 2008; Meyer, 2008:2009).

From the preliminary literature review, it is clear that the implementation of the Regional Indicative Strategic Development Plan (RISDP) has critically prepared a viable foundation for MNCs in South Africa to operate in the SADC. Despite the challenges faced thus far, it has been established that the importance of regional integration outweighs its demerits (Krawczyk, 2009; Madyo, 2009; Negasi, 2009; Amos, 2010; Chingono, 2010). However, not many scholars have researched the relationship between regional integration and South African MNCs’ operations in the SADC, which leaves many questions unanswered. This gap consequently emphasises the importance of this study and therefore creates a platform for this investigation.

1.4 Research Objectives

As stated earlier, the aim of this study is to determine the contribution of South Africa’s MNCs to both South Africa and the SADC. As well as, clearly point out whether the regulatory environment of SADC countries hinders the operation of South African MNCs within the region.

The primary objectives of this study are as follows:

(i) To evaluate the contribution of both regional economic integration and South African MNCs to the level of economic growth in the SADC.
(ii) To measure the impact that South African MNCs have on regional economic growth and investment in the SADC.
(iii) To ascertain whether South African MNCs contribute to both national and regional economic growth.
(iv) To ascertain whether the regulatory environment hinders the operation of South African MNCs that operate within the SADC.

1.5 Research Question/Hypothesis

In order to achieve the objectives of this study, it is important that the research question probes into issues that reveal a particular void in the extant body of literature that the study attempts to fill. Consequently, the following research questions is expected to be answered by this study:

1. Do multinational companies in South Africa contribute to South Africa’s economic growth?
2. Do multinational companies in South Africa contribute to the SADC’s economic growth?
3. To what extent does the regulatory environment of SADC countries hinder the operations of South African MNCs that operate within the region?
Subsequently, research hypotheses were designed and formulated to reflect the economic effects and investment imperatives of South African MNCs operation within South Africa and the SADC region.

_Hypothesis 1_

$H_{01}$: Multinational companies in South Africa do not contribute to South Africa’s economic growth.
$H_{a1}$: Multinational companies in South Africa contribute to South Africa’s economic growth.

_Hypothesis 2_

$H_{02}$: South African Multinational companies do not contribute to regional economic growth and investment in the SADC.
$H_{a2}$: South African Multinational companies contribute to regional economic growth and investment in the SADC.

_Hypothesis 3_

$H_{03}$: The regulatory environment of SADC countries does not hinder the operations of South African MNCs within the region.
$H_{a3}$: The regulatory environment of SADC countries hinders the operations of South African MNCs within the region.

1.6 Research Design

Research design refers to a systematic plan outlining the study, the researchers’ methods of compilation, details on how the study arrives at its conclusions and the limitations of the research (Wills, 2012). It relates to how a researcher puts a research study together to answer the research questions. This research was conducted using secondary data. Secondary data is an important component of research that is related to collection and processing of data by people other than the researcher. Secondary data has the obvious benefit of being already existing information that has been gathered and it covers a wider field (Boslaugh, 2007). This can instantly cut down on the cost of a research project. The secondary data for this research was generated from the McGregor Bureau for Financial Analysis (BFA) and other relevant sources.

As a quantitative study, it is necessary that there are enough data points to estimate a valid and reliable econometric system. It is therefore considered significant for the researcher to use data from the period between 1980 (when the SADC was formed) and 2011. The country/aggregate dataset was obtained from the African Development Indicators report, while the firm level data was elicited from World Enterprise Survey or McGregor BFA database. The firm level dataset was only obtained from MNCs that originate from South Africa, and have an operational footing in the SADC region. The study therefore assumes that the reliability and validity of data sets in the population increases while the level of sample error and bias reduces drastically due to the credibility of the data sources. The limitation of this study is that it does not investigate other factors, forces, and/or issue that do not
relate directly to the challenges confronting South African MNCs operating within the SADC.

1.7 Plan of the Dissertation

The structure of this dissertation is stated below:

**Chapter One – Introduction and background to the study:** Chapter One is a discussion of the background of this study and other important concepts. Furthermore, the problems addressed by the study are defined. The primary and secondary objectives are set out and a very brief description of the methodology to be followed is discussed. This chapter is a general introduction to the study.

**Chapter Two – The Theoretical Framework, Practice, and Concepts of Multinational Corporations (MNCs):** This chapter primarily discusses a general overview of the theoretical framework, practice, and concepts of MNC. It ultimately discusses in detail, the evolution and praxis of FDI.

**Chapter Three – The Dynamics of Economic Integration in the SADC:** This chapter specifically discloses the theoretical framework of regional economic integration, the importance of regional economic integration, the effects of a common currency accession and its strategic implication to South African multinational companies operating within the SADC.

**Chapter Four – Research Methodology:** In this chapter, the research methodology gives the reader a presentation of the chosen method as well as how the method helps to answer the research questions raised in this dissertation. The chapter ends with a presentation of the analysis process and finally, the limitations of the method are discussed along with the reliability and the quality of the empirical data used.

**Chapter Five – Data Analysis and Interpretation:** The purpose of this chapter is to analyse the secondary data collected and interpret the information gathered therein in relation to the hypotheses that are tested. It also summarises the data collected and attempts to find a meaningful conclusion to the study by either rejecting or accepting the null hypothesis that was formulated in Chapter One.

**Chapter Six – Summary of Findings, Recommendations and Conclusions:** In this chapter, conclusions are drawn from the literature and the empirical study. It discusses the findings of the research and recommendations are made to solve identified research problems.
CHAPTER TWO

THE THEORETICAL FRAMEWORK, PRACTICE, AND CONCEPTS OF MULTINATIONAL CORPORATIONS (MNCs)

2.1 Introduction

Literature over the past decade details how corporations have gained a significant increase in experience, while expanding their operations into foreign markets. Although a great number of these multinational corporations (MNCs) have diversified into global markets, due to a meltdown in advanced economies; these firms have now more than ever before begun an enormous investment drive into the developing countries. Despite the inroads of transnational companies into the developing economies, the crux of the matter is that most research on internationalisation of MNCs has focused on developed countries in North America and Europe (Silva, 2007; Ecorys, 2008; Kotelnikov, 2010; Smith, 2010; Carrillo, Lung and Tulder, 2012), thereby limiting the generalisation of the theoretical stream of these studies to the other economies that are not at the same stage of economic development and having different cultural orientation.

This chapter deals with relevant discussions on the theoretical framework, practice and concepts of MNCs with special reference to the Southern Africa region in general, and South Africa in particular. It presents a brief historical overview of MNCs, further to pointing out the role of MNCs in Southern Africa. Likewise, in line with the contemporary dynamics of the MNC, globalisation and transnational corporations was deconstructed in order to lay a theoretical framework for this study. More so, in this chapter a critical evaluation of scholarly works were carried out in order to determine the contribution of South African MNCs in the SADC. Furthermore, this chapter seeks to study the influence of these firms in the SADC, as the region proposes to implement a common currency accession.

2.2 Historical Overview of MNCs

The Thirteenth Century began with expeditions from adventurers who became prosperous from various foreign business operations (Buckley, 2012). Later, as knowledge spread westward from the Mediterranean region, nations such as Spain, Portugal, France, Holland and England started to send out larger and more organised explorations under men who undertook the dual task of taking the wealth of the newly-discovered lands while at the same time, claiming the lands for their respective monarchs – a practice which became known as colonisation (Ralls, 2007; Ames, 2008).

From as early as 1505 in England, one could find several instances where legal sanction was given for the mobilisation of resources in one nation to exploit the resources of another. One example of this was the grant by Henry VII of rights to the Company of Merchant Adventurers to become a chartered company with monopoly control over England’s cloth trade with other nations. Other forerunners of today’s MNCs could be seen in the organisational charters of the Russia Company and the East India Company (Ralls, 2007; Ames, 2008; Harrington, 2010; Acemoglu and Robinson, 2012; Buckley, 2012).
According to the Canon van Nederland (2014) the Royal Dutch East India Company was the first multinational corporation in the world and the first company to issue stock following its establishment in 1602 ahead of its rival British East India Company (Landow, 2013). Arguably, it was also the world's first mega-corporation charged with the responsibility by the royal entity to possess quasi-governmental powers, including the ability to wage war, negotiate treaties, coin money, and establish colonies (Ralls, 2007; Ames, 2008; Harrington, 2010; Keay, 2010).

Prior to the arrival of European settlers in the 15th century, the economy of what was to become known as South Africa was dominated by subsistence farming and hunting (Mufwene and Vigouroux, 2008; Butler, 2009). In 1652 a permanent European settlement was established in Cape Town to serve as a refreshment station for the Dutch East India Company that was plying trade between the Netherlands and the Dutch East Indies (the modern Indonesia). The discovery of diamonds in the Cape Province in 1866 and the discovery of gold on the Witwatersrand in 1888 led to the rapid industrialisation of South Africa and neighbouring countries such as Rhodesia (now Zambia and Zimbabwe), Nyasaland (now Malawi) and Mozambique (Walt, 2007). Historical writings point to the fact that the activities of these companies within the SADC were propelled by MNCs such as Anglo Platinum, De Beers, and Impala Platinum, among others (Millers, Saunders and Oloyede, 2008).

Kiechel, (2010) observes that many corporations now have offices, branches or manufacturing plants in different countries from where their original and main headquarters are located. He went on to state that the operation of these companies became intense during the industrial revolution; largely due to the depletion and saturation of local resource bases¹ and markets of their mother countries located mainly in Europe and America.

Of late, multinational corporations have become very big, with budgets that exceed some nations' GDP (Gustafsson and Segerstrom, 2010). The powerful influence of MNCs in local economies, and even the world economy, has positioned these enterprises strategically, as they now play an important role in international relations and globalisation (UNCTAD, 2011).

In the early phase of overseas expansion, it was customary for the business firm to either send a manager overseas or have someone in the head-office controlling its foreign operation (Jeffus, 2007). During the Nineteenth and early Twentieth Centuries, individuals bought stocks and invested in companies which operated abroad and were generally confined to certain explicit economic activities. But by 1914, "corporations could be formed by practically anyone for practically any purpose without limit of time or size" in both the U.S. and Europe (Ralls, 2007; Ames, 2008; Harrington, 2010; Acemoglu and Robinson, 2012; Buckley, 2012). The gains of the first economic order ultimately led the Japanese into bulk manufacturing, which later transcended into rapid industrialisation by the Asian Tigers (Henley, 2007; Huang, 2013; Mason, 2013; Studwell, 2013).

As MNCs spread their tentacles abroad, many overseas ventures require relatively large sums for capital investments. The introduction in the Eighteenth Century of the

---

¹ This is illustrated by Persaud (1976) in his dissertation titled Conflicts between Multinational Corporations and Less Developed Countries: The Case of Bauxite Mining in the Caribbean with Special Reference to Guyana.
device of the corporation as a separate legal entity with limited liability, among other factors, has helped entrepreneurs to raise the required sums for numerous capital ventures (Kiechel, 2010; Buckley, 2012).

After World War II, attempts were made by businessmen to reinstate the pre-war cartel arrangements and other similar trading practices (Eichengreen and Ritschl, 2008). However, the renewed contacts by emerging enterprises and new governmental actions in such areas as foreign trade all worked against the re-establishment of the old system. For instance, the United States activities in post-war European construction helped to place U.S-based MNCs on an early start ahead of their contemporaries. New studies by Walt (2007) have shown that corruption, wars and poverty caused the slow build-up of MNC activities in Africa. Although South African MNCs were better positioned to dominate the continent, sanctions against the country limited the international expansion plans of these firms. The institution of a democratic government in 1994 and subsequent abolishment of apartheid have significantly boosted the rating of the nation’s economy, and given rise to a flurry of activities by South African MNCs (SADC, 2012).

2.3 The Role of MNCs in South Africa

The influence of today’s MNC is global. Some studies have successfully researched the role of modern MNCs in trade, politics and economic growth. According to Mthombeni (2006:25) most studies on the economic impact of MNCs on their host market economies conclude that their overall effect is positive. These studies reveal that the proportion of sales in the home region of MNCs in “advanced” countries remains very high, or has increased in recent years. The 1981 Caborn report adopted by the parliament of the European Community found that multinational enterprises raise the level of world economic activity and have favourable impacts on productivity, growth rates and the overall level of employment, the dissemination of new products as well as an improvement in managerial expertise. Spero and Hart (2009) cited other benefits from the studies, including improvements in balance of payments, research and development and an improvement in the level of technology usage.

Papandreou (2001) states that MNCs’ critical aim is clearly to promote an extension and consolidation of a power-profit network across the world. As such an entry of South African firms into the SADC zone quintessentially facilitates a speedy transfer of vital requisite economic growth factors and development indices, largely necessary in the regional trade bloc, prior to a common currency accession.

According to Pradhan (2010) the infrastructure deficits in 24 African countries are cutting annual growth rates by up to two percentage points and reduce productivity by 40%. However, this creates opportunities for MNCs to provide the operational base that facilitates further economic growth. This is expected to significantly increase the revenue of the multinationals and aid the capital formation process within the SADC. Caholo (2012) gives credence to this statement by stating that the SADC’s infrastructure development master plan can only be achieved by leveraging Public Private Partnerships (PPPs) to close the region’s US$ 100 billion infrastructural gap in roads, railways, ports and inland waterways, power, communications and water infrastructure (TMSA, 2011).
At present, South Africa’s dwindling competitiveness, narrow geographical focus and lack of critical mass, portends a macro danger to the country economically. This has created room for the country’s MNCs to tap into the SADC region where it has competitive advantage, as well as a trade surplus over rivals such as China, the US and other European countries (Preuss, 2012; Stevens, Sherwood, Dunn and Loudon, 2012).

Recent studies carried out by Ngwawi (2012) suggest that a robust regional transport system and a solid infrastructural base hold the key to attracting investment into the SADC region, improving competitiveness and promoting trade. This has necessitated the SADC to implement the Spatial Development Initiative (SDI), as the region acknowledges that bridging the infrastructure gap has potential for deepening integration. It is anticipated that through the sharing of production processes, management and operations of infrastructure facilities such as hubs and development corridors, South African MNCs would appreciably increase the level of capital formation in the SADC (Department of Trade and Industry, 2013).

![Image 1]

**Figure 2.1: The Six Gaps (Source: Deconstruction work of Streeten 1974:252-5)**

Conventional neoclassical theory suggests that most underdeveloped countries typically suffer from four “gaps” which keep these countries trapped in a low-growth scenario (Gerring and Thacker, 2008; Yusuf, 2009; Dunning, 2010). However, this study has deconstructed Streeten (1974) work and in the process identified six gaps which is depicted in Figure 2.1 above and mentioned thus:

1. The resource or savings gap, which arises from the shortfall between the level of locally mobilised savings and the desired level of investment.
(2) The foreign exchange or trade gap, which is the result of a difference between the level of foreign exchange earned by the LDC from exports and the level of foreign exchange required to finance (capital equipment) imports necessary for development.

(3) The skills and technology gap, which refers to the difference between the level of domestic (labour and management) skills and technology as opposed to the level of skills and technology extant in more developed countries (MDCs).

(4) The budgetary gap or budget deficit, which arises out of government expenditure exceeding revenue.

(5) The revenue gap, which refers to the difference between the levels of projected or targeted government tax revenues and the actual or locally mobilised taxes.

(6) The innovation gap, which arises from the shortfall in the level of creative destruction that is associated with business development, and the current entrepreneurial process of doing business that is crucial to the continued success of firms.

Contemporary research points out that an exhaustion of the "six gaps" problem eventually leads to proffering a common solution for the SADC to break out of the vicious circle of poverty through a creative destruction process that ultimately leads to a virtuous cycle of development. This can be achieved as espoused by numerous researchers through foreign investment that thrives as a result of MNCs’ activities (Dunning, 2010). Instead of SADC member states sourcing funds to finance capital projects at great social cost to the society, South African MNCs should be encouraged to provide alternative financing options (SADC, 2012).

The first important contribution of MNCs is their role in filling the resource gap between targeted or desired investment and domestically mobilised savings (Msuya, 2007). For example, to achieve a 7% growth rate of national output if the required rate of saving is 21% but if the savings that can be domestically mobilised is only 16% then there is a “saving gap” of 5%. If the country fills this gap with MNCs foreign direct investments, the SADC would be strategically positioned to achieve its target rate of economic growth. According to Nene (2009) as a percentage of disposable income, household savings have fallen from 5.4% in the 1980s to 0.28% between 2000 and 2008 (World Economic Outlook, 2012). As a consequence, household debt has risen steadily in recent years, and currently stands at 76.7 per cent of disposable income. By implication, MNCs’ investments have been able to fill up the savings gap (South African Revenue Service, 2012).

The second contribution relates to filling the foreign exchange or trade gap. An inflow of foreign capital can reduce or even remove the deficit in the balance of payments if the MNCs generate a net positive flow of export earnings (Blanchard and Miller, 2010; Sen, 2011; Okeyika, 2012; Pawar, 2013). Trade balance according to the IMF (2011) is the difference between the monetary value of exports and imports of output in an economy over a certain period. It therefore means that whilst MNCs exports increase, the level of nominal imports decreases, thus allowing for a favourable balance of payment.
As oil prices increase, coupled with increases in domestic demand, South Africa's trade balance is definitely at the lower end of its business cycle (Freemantle and Stevens, 2011; Standard Bank, 2011). Recent studies have shown that exports depend negatively on the exchange rate (which is defined as number of units of domestic currency to a unit of forex); whereas imports depend positively on it. It can thus be deduced that exchange rate change determines the swing in the trade balance as an effect of export and import elasticities (Iley and Lewis, 2007; 2013). For the trade gap to be positive, the development of the capital account, current account and the change in the country's foreign reserves is a fundamental factor that cannot be ignored (Draper and Freytag, 2008).

![Figure 2.2: South Africa Current Account 1953-2007 – Millions US $ (Source: IMF, International Financial Statistics)](image)

According to the OECD (2013) a contributing factor to the financial crises of 2007-2010 was the record imbalances in elements of the Balance of Payments BoP, such as the current account, financial account, and capital account plus or minus the balancing items. This notion is further strengthened by Duncan (2008), who observes that current account factors are the primary causes of BoP imbalances; these factors include the exchange rate, government’s fiscal deficit, business competitiveness and private behaviour such as the willingness of consumers to go into debt to finance extra consumption (Wolf, 2009).

Draper and Freytag’s (2008) view is that the South African current account deficit has grown to large proportions in recent years. Their research findings further suggest that a key component of the current account deficit is the growing trade deficit. However, these deficits are measured as strengths instead of weaknesses, due to the huge influx of FDIs into the economy by MNCs, which led to further expansion of these companies to other countries in Africa. The OECD (2013) analysis of physical trade balance shows that monetary balance of trade is different from physical balance of trade (which is expressed in amount of raw materials, known also as Total Material Consumption).
A fundamental problem therefore arises; despite improvements in commodity prices, the current account balances of most SADC member states remain wide. The region’s current account deficit in 2009 was 10.5 per cent and has further widened to 12.3 per cent in 2010, from a conservative 2 per cent deficit in 2006. This according to recent research by the SADC (2012) and the IMF World Economic Outlook - WEO (2012) was largely due to rising imports supported by a weak domestic economy in SADC countries.

After a thorough analysis of the structure of imports made, South Africa's growing import bill has not been squandered on consumption goods, as the data shows (Draper and Freytag, 2008). Indeed, what is remarkable is the relative consistency of its broad import structure: over twenty years, more than half of South Africa's imports have been capital and intermediate goods, regardless of the trade balance (UN Department of Economic and Social Affairs, 2008). Often, primary raw materials are bought from developing countries at low prices, and then converted into finished products; and a significant amount of value is added, then exported back to these countries by MNCs at a higher price. As a direct consequence, intra-regional flows within the SADC account for about 20 per cent of total trade. This according to the UNCTAD (2011) is largely due to the growing presence of South African MNCs in these countries.

Table 2.1: Macroeconomic Convergence Targets

<table>
<thead>
<tr>
<th></th>
<th>2008</th>
<th>2012</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation (annual rate)</td>
<td>Single digits</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Fiscal deficit</td>
<td>5% of GDP</td>
<td>3% of GDP as anchor, with a range of 1%</td>
<td>3% of GDP as anchor, with a range of 1%</td>
</tr>
<tr>
<td>Public debt</td>
<td>60% of GDP</td>
<td>60% of GDP</td>
<td>60% of GDP</td>
</tr>
<tr>
<td>Current account deficit</td>
<td>9% of GDP</td>
<td>9% of GDP</td>
<td>3% of GDP</td>
</tr>
</tbody>
</table>

Source: SADC, 2010

Following several years of sustained growth, for the first time since 1992 South Africa's economy fell into recession with GDP contracting by 1.8 per cent in 2009 (Burgess, 2009). According to the United Nations (2012) the weakening of domestic demand coupled with a sharp fall in exports as an aftermath of the global economic crises led to a slowdown of the economy. As a result, the nominal GDP of the country grew by 4.6%, accounting for a figure of US $ 277.4 billion, while GDP by sector was 0.9% for agriculture, 20.6% for industry and 78.5% for services. However, despite the economy performing below expectation, inflation increased mildly to about 5.3% in 2011, which is almost at par with the 5% inflation target set by the SADC for 2012 as illustrated in Table 2.1 (Africa Economic Outlook, 2011: 227).

Valsamakis (2012) agrees with the findings of earlier studies. He affirms that South African MNCs have contributed tremendously to the growth of exports into the SADC. The recent financial statements of South African MNCs reveal that enormous revenues were made from exports by companies such as Anglo, BHP, Kumba, MTN Group, Naspers, and Sasol. Moreover, other smaller companies have helped to
further increase South Africa’s national GDP largely due to increasing levels of taxable profits, thus reducing the current account deficit (OECD, 2013; UNDP, 2013). Recent studies by UNCTAD (2011) conclude that the country’s main export partners Japan, USA, Germany, United Kingdom, China and Netherlands bought gold, diamonds, platinum, other metals and minerals, machinery and equipment, while South Africa’s main exports to Africa was in the telecommunications, retail, breweries, banking, and specialised service sector.

An analysis of the current trade statistics shows that the level of exports increased, while the amount of imports declined largely due to increased levels of market capitalisation on the Johannesburg Stock Exchange which is estimated at about $ US 1 trillion and increasing levels of FDI into the country (Parker, 2009; South African Reserve Bank, 2012). Also, South Africa had reserves of foreign exchange and gold worth US $37.41 billion, while the current account balance had a deficit of US $20.06 billion (National Treasury, 2013). Further analysis of all the economic pointers set by the SADC, shows that South Africa's performance has exceeded the microeconomic convergence targets with a public debt of 35.7% of GDP, an inflation rate of less than 5% and a current account deficit that is less than 7.3% of GDP, critically positioning the country for a sound macroeconomic integration (South African Reserve Bank, 2013).

Although the country has had positive economic indices, South Africa’s current intended expenditures exceed revenues, signifying that the government is running a budget deficit. These indicators therefore show that the country is at the lowest point in its business cycle. Figure 2.2 shows that the current account deficit is at the highest point in South African history. As stated earlier this could be traced to the global economic meltdown; which has culminated in social problems like high levels of unemployment and crime, low tax revenues and expenditure (e.g. on social security). In addition, there is a high rate of illegal migration that adds more cost to the government, arising from instability in neighbouring countries (Sibanda, 2008; United Nations, 2012).

Persaud (2010) suggests that the trade gap indicates the difference in value over a period of time of a country's imports and exports of merchandise. It therefore plays a dominant role in today's economy, as it reveals the performance of a country's MNCs. In 2009, the cumulative trade deficit for South Africa was R25.84 billion, compared to a deficit of R71.63 billion in 2008; this represents a decline of 64% (EconomyWatch, 2010). To further reduce the trade gap, five of the Department of Trade and Industry (DTI’s) priority sectors, namely textiles, transport, chemicals, minerals and agriculture were repositioned and have started yielding huge revenues for the nation. SASOL played an instrumental part in the success in the chemicals industry. Furthermore, increased liberalisation of the industrial sector and decreased protectionism has helped to promote the agricultural sector through improved packaging as well as a commitment to surpass international standards (DTI, 2011).

From the preceding studies, the researcher concluded that the third important role of MNCs is filling the gap between targeted governmental tax revenues and locally raised taxes. By taxing MNC profits, LDC governments are able to mobilize public financial resources for development projects (Okeyika, 2012; Pawar, 2013). The South African Revenue Service (2010) has observed that for the 2009/2010 fiscal year tax revenue collected amounted to R598.7 billion, a 4.2% decrease year-on-
year that is attributable to the global financial crisis, consequently budget revenue decreased to about 23.6% of GDP. Of the total tax collected, South African MNCs contributed over R200 million. The South African Revenue Service (2010) further indicates that the average tax assessed has increased tremendously, while the number of companies enlisted to pay tax reduced drastically. Companies' assessed data for the 2008 tax year shows that 34.2% of the 473 034 companies assessed had positive taxable income, 35.2% had negative taxable income and 30.6% had taxable income equal to zero (National Treasury, 2011). It may therefore imply that due to regulatory oversight, the level of competitiveness has decreased within the country; hence there is need for South African MNCs to diversify into offshore markets, especially the SADC countries due to their proximity.

Despite the fact that South Africa is one of the economic giants of Africa, the problem of unemployment has continued to ravage its economy. A recent Inter-Agency and Expert Group research report on the Millennium Development Goals (MDGs) that was carried out by the United Nations Department of Economic and Social Affairs (2012) reveals that about a quarter of the country's population is unemployed and lives on less than US $1.25 a day. The problem of skills shortage in the country has been aggravated by the problem of brain drain, few highly skilled workers and a large unskilled workforce. After reviewing the findings of various studies, Eriksen (2013) was of the view that a key solution to close the skills gap is to relax the immigration legislation in the short run, as it deemphasises skilled migration.

The fourth major contribution of MNCs is that apart from the fact that multinational companies provide financial resources to further production, they also supply a “package” of needed resources that includes management experience, entrepreneurial abilities, and technological skills. These resources can be transferred to local firms by means of training programs and the process of “learning by doing” that only occurs through practice. According to Erasmus and Breier (2009) South Africa's skills shortages are widely regarded as a key factor preventing the achievement of targeted growth rates. However, disputes may arise regarding the nature and extent of these shortages, given that the country has a large pool of unemployed graduates.

A critical example of this problem is the Sasol scenario. Sasol’s investment in its wax-production facility helped double the company’s hard wax production capacity in South Africa, said Sasol Wax MD Johan du Preez (SA Info, 2008). However, despite the fact that the company’s expansion projects created much-needed employment opportunities and revenue, due to a lack of skilled coded welders, well-trained scaffold builders as well as, to a lesser extent, boilermakers and fitters, this lofty objective could not be achieved. This lacuna in skills needed to drive South African MNCs created a room for new research studies to understudy how these corporations can train their own manpower appropriately.

According to the Minister of Public Enterprises, Malusi Gigaba (2011) in order to vamp up necessary skills needed to carry out South Africa's current infrastructure bulb program, Eskom decided to train 5,283 learners. The significance of such training programs is that skilled professionals can be trained on how to perform their tasks in the country, as well as help train local and foreign personnel to man South African MNCs worldwide. That initiative consequently leads to increased revenue for
both the company and the nation at large (Devinney, Pedersen and Tihanyi, 2010; 2012).

Recent studies carried out by Bashir (2009), and Wolf (2011) stress that highly professional vocational and technical training should be given to unskilled workers in order to increase their level of productivity and performance. Moreover, higher education and technical institutes was geared to develop curriculum that can fill areas of skills shortage in the economy. It therefore means that for South Africa's GDP to grow consistently, all aspects of the country's skills development structures comprising the 21-sector education and training authorities (SETAs), National Skills Development Strategy III (NSDS3) and other relevant programs must be implemented in such a way that all components of the BBBEE program is considered (PSETA, 2012; Akoojee, 2013).

Apart from skills shortage, another factor of great value that needs attention is innovation. According to Anthony (2013) innovation is simply the key to economic growth. For today’s MNCs to be successful they have to formulate solutions that meet and exceed current expectations of consumers (Moore, Ancien, and Comerford-Morris, 2013). New research reveals that due to the significance of innovation, South African innovation and technology agencies have now renewed their mandate to focus on innovation replication in commercially viable areas and the need for social entrepreneurship models to address development challenges (KEN, 2013). Consequently, South African MNCs and research companies have started developing new innovative products. For example, Vodacom has pioneered and developed a solar-powered cell phone, while Sasol has pioneered research into clean fuel and the development of a hydrogen bike. Moreover, Sasol's Sasolburg operations as a result of innovative technological advances have made it possible to build a gas fired plant that reduces CO₂ emissions from Sasolburg by a further one-million tons a year (IT News Africa, 2010; Sasol, 2013).

According to Vernon (1979), product innovation gives the innovative firm a monopolistic advantage, which it first exploits at home and then abroad. Countries and regions have tended to stimulate innovation as a fundamental source of competitiveness by building on locally generated intellectual property (Chan and Pretorius, 2007). Contemporary studies show that South Africa is one of the few countries at the forefront of all innovations initiated in Africa. Currently, research is at an advanced stage in bio-fuels, bio-products and biotechnology sectors of the economy. Furthermore, in order to plug into modernism, the sum of 219 million rand was invested to build a state-of-the-art Innovation Hub; which has led to pioneering new fields of research (SA Yearbook, 2013; SA Info, 2014). Not resting on its laurels, the country put in place another science and technology park in Pretoria to spearhead research in electronics, information and communication technology, bioscience as well as advanced manufacturing sectors such as defense spin-off and automotive manufacturing.

Aswathappa, (2010) is of the view that MNCs bring with them the most sophisticated technological knowledge about production processes. Moreover, these firms transfer modern machinery and equipment to capital poor LDCs. Such transfers of knowledge, skills, and technology are assumed to be both desirable and productive for the recipient country to kick-start economic development (World Investment Report, 2012). For instance, Sasol’s proprietary Fischer-Tropsch (FT) technology
was responsible for advances in the production of cleaner liquid fuels within the SADC. The company’s diesel, produced through gas-to-liquids and coal-to-liquids technologies, have low sulphur and emissions levels, which has necessitated these technologies to be adopted by all its worldwide operations (Sasol, 2010). Also, AngloGold Ashanti’s deep mining technologies and safety standards with its low economic costs were responsible for an increase in company profits (AngloGold Ashanti, 2011). Likewise, MTN’s fibre-optic backbone network helped the company to meet an increasing demand for bandwidth from its customers, skyrocketing profits that have consequently assisted the company to spread its operations all over the SADC region (SA Info, 2012).

MNCs also bring several other benefits to the host country. Domestic labour may benefit in the form of higher real wages, while consumers benefit from lower prices and better quality products. Tambunlertchai (2009) posits that investments by MNCs induce more domestic investment. For example, ancillary units can be set up to “feed” the main industries that serve these MNCs, as observed in South African telecommunications and agro-allied sector. Moreover, MNCs’ expenditures on research and development (R&D), although limited, are bound to benefit the host country. Apart from the aforementioned, the study suggested that companies tend to benefit from these indirect gains through the realisation of external economies of scale.

Despite all the favourable arguments for MNCs, scholars such as Rao (2008), Majeed and Ahmad (2009), Dusanjh (2010), Giuliani (2010) and Teixeira and Grande (2012) have observed negative roles of MNCs in their host countries. According to Lalnunmawia (2010) these arguments against MNCs are noteworthy, and as such they are examined below:

1. Although MNCs provide capital, they may lower domestic savings and investment rates by stifling competition through exclusive production agreements with the host governments. Woldemeskels (2008) supports this argument by affirming that MNCs often fail to reinvest much of their profits, and inhibit the expansion of indigenous firms through profit repatriation.

2. Although the initial short-run impact of MNC investment is to improve the foreign exchange position of the recipient nation, its long-run impact may reduce foreign exchange earnings on both current and capital accounts (Wei, 2009). The current account of host nations may deteriorate as a result of substantial importation of intermediate and capital goods (this is shown in Figure 2.2), while the capital account of the country may worsen because of the repatriation of profits, interest and royalties overseas (Singh, 2012).

3. While it is a known fact that MNCs contributes to public revenue in the form of corporate taxes, their contribution is considerably less than it should be as a result of liberal tax concessions, excessive investment allowances, subsidies and tariff protection provided by the host government. Most times, these companies are unwilling to invest in LDCs, except the regulatory authorities in these countries provide them with mouth-watering incentives (Reuter, 2012).

4. The studies of Wright, Liu and Filatotchev (2012) and Pawar (2013) conclude that the management, entrepreneurial skills, technology, and overseas contacts provided by the MNCs may have little impact on developing local skills and
resources. In fact, the development of local skills may be inhibited by these MNCs, as they stifle the growth of indigenous entrepreneurship due to their dominance of local markets. To further compound the problem, very few MNCs set up research stations in the SADC, instead they employ pure research scientists for process and product development, thus inhibiting technology transfer (Ngwawi, 2006; Mugwagwa, 2011; Menéndez and Kahn, 2014).

5. New research shows that MNCs’ impact on development is very uneven. According to Lalnunmawia (2010) in many situations MNC activities reinforce dualistic economic structures and widen income inequalities. He further argued that they tend to promote the interests of few modern-sector workers only, and that they also divert resources away from the production of consumer goods by producing luxurious goods demanded by the local elites.

6. Mthombeni (2006) posits that MNCs typically produce inappropriate products and stimulate inappropriate consumption patterns through advertising that is reinforced by their monopolistic market power. Mashilo (2010) and Valsamakis (2012) contended in their research that since MNC production is done with capital-intensive techniques, they may not be useful in labour surplus economies like that of the SADC. Thus their presence further aggravates the unemployment problem that already exists in these countries.

7. As stated earlier, an adept analysis of the behavioural pattern of MNCs reveals that they do not engage in R & D activities in underdeveloped countries (Quan, 2007; Lam, 2008; Sofka, Shehu and Faria, 2010; Hannas, Mulvenon and Puglisi, 2013). However, LDCs bear the bulk of their costs. According to Rodney (2012) Africa’s steady colonisation and neo-colonisation by foreign MNCs was simply an act to extract her mineral wealth and exploit her cheap labour, owing to the fact that these countries have lax labour and environmental laws, which makes it possible for MNCs to siphon profits back to either the Far East or the West. Furthermore, with the SADC and Africa being defenceless in the face of subsidised Western imports, Western political meddling, and forced privatisation schemes of public services that are widely favoured by international monetary agencies as the prerequisite to collect more loans to fund budget deficits, these countries cut public spending in order to keep foreign investors and speculators happy (most times leading to the devaluation of national currency in order to make room for more borrowing).

8. According to Rugraff and Hansen (2011) MNCs often use their economic power to influence government policies in directions unfavourable to national development. Most times, the host government has to provide them special economic and political concessions in the form of excessive protection, lower tax, subsidized inputs and cheap provision of factory sites at export processing zones (EPZ). Consequently, the private profits of MNCs may exceed social benefits (Lalnunmawia, 2010).

9. Finally, Lalnunmawia (2010) and Meier-Comte (2012) conclude in their studies that MNCs drive out local competitors and inhibit the emergence of small-scale enterprises. According to Mthombeni (2006) and Pawar (2013) MNCs may damage the host countries by suppressing domestic entrepreneurship through their superior knowledge, worldwide contacts, and advertising skills.
2.4 Globalisation and Transnational Corporations

The regulation and governance of international business, trade and investment has been greatly influenced by the phenomenon termed globalisation in recent years. Contemporary studies carried out by Canuto and Ghosh (2013), as well as Rodrigue, Comtois, and Slack (2013) suggest that international business involves no fundamental shift in the underlying principles of trading or business functions but simply entails more cross-border transactions. In simpler terms it includes all commercial transactions – private and governmental – between two or more countries (Cherunilam, 2010). Joshi (2009) supports the notion by stating that private companies usually undertake such transactions for profit, while governments may or may not do the same in their transactions.

Rather confusingly, “globalisation” is used by some researchers to refer to the efforts of the International Monetary Fund (IMF), the World Bank and others to create a global free market for goods and services (Ebimaro, 2009; Infed, 2013). The World Bank (2013) however, defines globalisation as the global integration of economies and societies. In this sense, globalisation is viewed as a process that connects the entire world irrespective of geographic divide (Aregbeshola, 2012).

However, the most suitable definition of globalisation is by Karlsson, Johansson and Stough (2009), here the term is defined as the growing interdependence of countries worldwide that is facilitated through the increasing volume and variety of cross-border transactions in goods and services and of international capital flows, and also through the more rapid and widespread diffusion of technology. Aregbeshola (2012) concludes that with the easy flow of goods and services, a proficient allocation of relatively scarce global resources is achievable. Consequently, this process thus allows global manufacturers to seek and exploit location specific advantages across the globe (Oh and Rugman, 2012).

Based on the fundamental premise of the findings of previous reports Mittal (2014) and Ghadge (2014) thus defines a multinational corporation (MNC) or transnational corporation (TNC) as a corporation or enterprise that manages production or delivers services in more than one country. Today, globalisation has placed a new set of players on centre-stage: one of which is transnational corporations that dominate production, investment and trade, while the other TNCs dominate the technology in the globalisation process (Smith, 2010).

Economic historian Besser-Periera (2010) suggests that after the demise of Marxist ideology, Neoliberal ideas dominated global economic policies; this necessitated the adoption of a free market system by the world economy, in the form of globalisation and increased multinational operations. However, according to Korten (2011) their free trade policies did not free trade, markets or people. Rather they freed resources for multinational companies to expand and control their host economies and government (Menipaz and Menipaz, 2011; Reich, 2011).

Bonanno and Constance (2008) argue that the shifting dynamics of space and time have created a new capitalism that is qualitatively different from capitalism inspired by patterns of international relations established throughout the nineteenth and early twentieth centuries. This “time-space compression” is one of the defining components of contemporary globalisation. Primarily, globalisation has been observed to be an economic process. However, as the phenomenon of globalisation
grew, new powerful forces began to emerge. These were organisations, multinational companies, banks, among others, that operated freely in multiple countries, often at the same time (Mazlish, 2012). Contemporary studies by the World Trade Organisation (2012) have therefore classified these transnationals advocating globalisation into three groups:

1. Large manufacturing corporations (for example Nike, Sony, Toyota, Anglo American) that produce goods in countries that offer the lowest wages and best tax incentives, and sell their goods around the world.

2. Banks (for instance Standard Bank, ABSA, HSBC) that sell their financial services around the world. This however involves the process of financialisation (that is the increasing flow of money, as opposed to goods and services, between nations) that usually increases the wealth of the elites and impoverishes ordinary citizens.

3. International government organisations (such as the UN, WTO, World Bank and IMF) that play a key role in promoting globalisation.

Transnational corporations are now the most powerful actors in the current socio-economic scenario. Under globalisation, TNCs enjoy enormous powers, which are historically unmatched. These expanded powers have now allowed TNCs to significantly affect a nation-state's actions and avoid unwanted state demands as well as those of a number of social groups. Moreover, the findings of recent studies have shown that globalisation weakens the nation-state and transforms it into an agent of transnational capital (Mthombeni, 2006; Mazlish, 2012).

The fact that MNCs provide immense resources, investments, technology, innovation and expertise to their host societies, make them more relevant in today's modern economy. Transnational corporations’ culture of research and development has thus encouraged human resources advancement, which has further led to increased efficiency. Since they contribute significantly to the national exchequer of LDCs like the SADC by paying taxes, most governments cannot function without their input. MNCs have successfully introduced a professional working environment and culture for local organisations to emulate, thereby promoting sound management and business education. These companies have also significantly helped in improving the infrastructure base of their host country. According to the World Trade Organisation (2012), MNCs account for 70 per cent of the total world foreign trade, which is over US $7 trillion. In addition to this, MNCs have been able to improve cross-cultural understanding due to the pluralistic nature of their operations. The diversity of their employees working together in different parts of the world has further strengthened global peace and unity.

World Investment Report (2013) suggests that of the 100 largest TNCs, 90 of the TNCs come from the "Triad" (Europe, North America, Japan) while the remaining 10 come from developing countries. TNCs have a tremendous impact on global trade and investment. They also have a strong impact on developing countries' economies, as they represent the principal source of external finance for developing countries. While the world economy may be global, laws, regulation, politics, and society are still largely national, only slowly emerging from boundaries imposed by the modern international or Westphalian states system (Kobrins, 2008).

The activities of multinational enterprises have had a huge impact on the concept of
Since these MNCs contribute significantly to the levels of economic activity, it is the desire of numerous countries to attract MNCs to invest in their economies, as they trigger a multiplier effect (Dullien, 2010). However, on the contrary, a notable scholar Ritzer (2011) has voiced his criticism thus: that the globalisation of the world economy requires financial market linkages that now constitute a risk factor, especially on issues such as economic stabilisation, inequality, inefficiency, corruption and fraud emanating from this glocalisation (Brière, Chapelle and Szafarz, 2012; Telò and Ponjaert, 2013).

2.5 Contribution of South African Multinationals to the Growth of the SADC Zone

South Africa is one of the economic giants of Africa, contributing nearly 40% to the continent's total GDP (Vilakazi, 2009). In the manufacturing sector, 75 out of the 100 main African companies belong to South Africans. Although South Africa accounts for only 6% of Africa's Population, it is responsible for 25% of Africa's GDP, 40% of Africa's Industrial output, over 45% of Africa's mineral production, 50% of Africa's purchasing power and over 50% of Africa's energy consumption (World Investment Report, 2010). Research by Martin (2008) and the World Bank (2012), has also suggested that by contrast to the rest of the continent, South Africa possesses industrial, commercial, infrastructural and financial power. According to Vilakazi (2009), the government spent over $75 Billion US dollars in infrastructure investment, making South Africa a strategic base for both regional and continental initiatives, in a move that aids capital formation in the SADC zone.

A study carried out by Nkomo (2010) points out that there is a relationship between economic growth, energy use, poverty alleviation and development in the SADC. He further states that once energy is in short supply, it becomes more costly and depresses the economy, leading to increases in unemployment and compromises development prospects for the region. According to Terence Creamer (2012a: 2012b) a lack of interconnected power grid, embedded generation with net metering and time of use tariffs for homeowners (Lipschitz, 2012) and regulatory uncertainties have become major problems hampering the development of much-needed private power capacity in the SADC. Power shortages therefore constitute a major constraint to South Africa achieving a growth rate of 2.7 per cent. Also, on an aggregate level, this problem hinders the SADCs regional integration agenda (National Treasury, 2012; World Bank, 2012).

Southern Africa embarked on a number of short- and long-term projects to bolster its power generation capacity by more than 42,000 megawatts (Ngwawi, 2012). However, the Southern African Power Pool (SAPP) (2012) coordinated plan to generate and transmit power cost the region US $ 8 billion, while the sum of individual plans by the respective power utilities was expected to cost more than US $ 11 billion. This triggered new research into cheap ways to generate and transmit power. For instance, Sasol's use of R 1.8 billion to generate 140 MW of electricity in its new gas-fired plant is about a third of estimated cost of nuclear power construction and half the cost of a coal-fired plant. This indicates that low construction costs definitely revolutionises the power sector’s efficiency levels and significantly improves productivity levels in the SADC (Ngwawi, 2006; TMSA, 2011; TMSA, 2012).
A comprehensive study on South African multinationals operating in Southern Africa emphasises how TNCs, headquartered in South Africa, were the conduits for unequal regional development that have had immense benefits to both South Africa and other colonial metropoles (Miller, 2005).

Another milestone area where South African multinational companies have contributed immensely is in the SADC transport sector. Sapa (2012) is of the view that Transnet’s indication that it needed 1064 locomotives in seven years – or 152 locomotives a year – as part of its R 300 billion market demand strategy, significantly improved the ailing transport sector. This helped to further integrate the SADC market by reducing transport time, distance and cost of travel for both goods and services, and, for people in transit. A concrete drive into the SADC by South African MNCs further stimulated demand and helped in the development of ancillary industries that generated new jobs, which led to sustainable growth and development in the region. With the knowledge of the benefits of a viable transport system in mind, Transnet’s management started building a factory that would manufacture and fabricate more than 7000 metro rail coaches for use in the SADC.

New studies observe that the investment of South African companies operating in the SADC is yielding substantial benefits for Africa (Statistics South Africa, 2012). Their achievements have been predominantly in the areas of job creation; upgrading of existing and building of new infrastructure including investment in backbone services, and technology transfer through human resource development (National Planning Commission, 2011), increased tax revenues; increased consumer choice; and boosting general investor confidence in host countries (Draper, Grant, Kingombe, and Velde, 2011; Landsberg and Wyk, 2012). Consequently, South African companies have directly contributed to the slow build-up of crucial productive infrastructure in the region (Draper et al., 2011).

The Famine Early Warning Systems Network - FEWSNET (2012) notes that despite the high levels of acute food insecurity in Africa, the SADC remains generally food secure. As an adage goes, it is only a healthy man that can produce; an allusion to the situation in famine stricken countries of Eastern Africa thus comes to mind. Recent empirical evidence from Statistics South Africa (2012) database shows that the vertically backward integration strategies of fast-moving consumer goods companies in South Africa such as Shoprite, Massmart, Spar and Game has sufficiently helped to build and acquire farms that meet the food deficit levels in cereals, legumes and other cash crops, largely due to the commercialised and mechanised kind of agriculture that is being practiced (FAO, 2008; Mudhara, 2010; Neves, 2014). It therefore implies that a healthy South Africa holds the key to outward investments and development in the SADC, unlike Eastern Africa where productivity is at its lowest ebb due to high levels of famine.

Given the large number of portfolio inflows into South Africa from the rest of the world, recent studies by the JSE (2013) suggests that these inflows are recycled as FDI outflow to the region; in other words, it is possible that South Africa's sophisticated financial markets are being used to channel resources across Africa. Despite the positive impact of FDIs by these MNCs, to the contrary, a number of problems have been cited. An example of the direct costs associated with South African outward FDI into African host states include the citing of 12 South African companies for allegedly looting mineral resources in the Democratic Republic of
Congo (Sigué, 2008; Draper, Kiratu and Samuel, 2010), and alleged flouting of labour standards by Anglo American’s former subsidiary AngloGold Ashanti in Congo (Anglo American, 2007; AngloGold Ashanti, 2010). Lonmin Marikana mine crisis is another notable example that indicates the reason why South African MNCs need to improve on their labour standards (Japarov, 2012; Cook, 2013).

Draper, Grant, Kingombe and Velde (2011) made a strategic comparison between the level of South Africa’s foreign assets in SADC countries and the rest of Africa for the period between 2003 and 2007. They observed that, as at 2007, investment in the region reached a peak of US $8.7 billion, while investment in Africa surged to US $16.6 billion, increasing by 47 per cent. This performance by South African multinationals has since led to a new economic renaissance by many African countries such as Angola and Mauritius, which were once classified as Highly Indebted Poor Countries (HIPC).

Nonetheless, the advent of Chinese outward FDI thrust into Africa is forcing South African (and other) investors on the continent to up their game and provide better quality products at lower prices, notwithstanding the huge capital cost involved in the establishment of these companies (Draper, Kiratu and Samuel, 2010).

According to Whitfield, Therkildsen, Buur, and Kjær (2013) South African companies conceptualised the largest-ever foreign direct investment in Mozambique; that was used to build MOZAL aluminum smelter in Maputo. Jordaan and Kanda (2011) are of the view that MOZAL is the flagship of South Africa’s foreign policy for regional integration in southern Africa. This has aided economic reconstruction in Mozambique, which is a practical manifestation of the African renaissance. The milestone achievement was that the capitalisation of the MOZAL project, estimated at US $1.3 billion, was about half of the estimated Mozambican GDP of US $2.8 billion in 1998 (Gqada, 2013). This move has further increased the trust and support for South African MNCs by SADC countries that want complete integration by 2018 (Warren-Rodríguez, 2008; Stephan and Hervey, 2008; Gqada, 2013). As matter of fact, MOZAL is one of the most modern smelters in the world, relying on only 750 people to operate its advanced technology (Therkildsen, Buur, and Kjær, 2013).
Table 2.2: The equity Funding, Loans, Smelter Cost and Shareholding in Mozal

<table>
<thead>
<tr>
<th>Mozal</th>
<th>Billiton</th>
<th>IDC</th>
<th>Mitsubishi</th>
<th>Financial loan from</th>
<th>Mozambique</th>
</tr>
</thead>
<tbody>
<tr>
<td>A company and FDI in Mozambique</td>
<td>Financial equity in US$: 245 mn (49%)</td>
<td>Financial equity in US$: 125 mn (25%)</td>
<td>Financial equity in US$: 130 mn (26%)</td>
<td>International Financing Corporation, IDC, SA banks and others</td>
<td>Financial equity in US$: 0, but provided 140 hectares of land</td>
</tr>
<tr>
<td>Capital inflows in: US$ 1.3 bn</td>
<td>Total equity funding from the Billiton-IDC-Mitsubishi joint venture (Mozal shareholders) in US$: 500 mn</td>
<td>US$ 820 mn lent to Mozal shareholders</td>
<td></td>
<td></td>
<td>Country where Mozal company is</td>
</tr>
<tr>
<td>Shareholding in US$</td>
<td>Undisclosed</td>
<td>Undisclosed</td>
<td>Undisclosed</td>
<td>Undisclosed loan guarantee/security</td>
<td>Preferential shares in US$: 20 mn</td>
</tr>
</tbody>
</table>

**Source: IDC, 2010**

The table above shows the equity funding for MOZAL Aluminium smelter. At present, BHP Billiton has a 47.1 per cent interest in the joint venture, while Mitsubishi Corporation has 25 per cent, Industrial Development Corporation of South Africa Limited has 24 per cent, and the Government of Mozambique has 3.9 per cent equity in the company. Eskom’s role in the joint venture was to provide the road and power infrastructure that ensured the success of the smelter. Although, Mozal 1 was launched in 1998, and it was successfully completed six months ahead of schedule on the 29th of September 2000 with more than US$100 million under budget, it was testimony of South Africa’s MNCs effectiveness and efficiency (BHP Billiton, 2012).

The Mozal 2 expansion project was approved in June 2001 and expanded the output of the smelter from 253 000 to 506 000 tpa of primary ingots. The first aluminium was cast at the expansion project on 7 April 2003. Meanwhile, Mozal 2 was fully commissioned in August 2003, US$860 million below budget. Up to August 2010, Mozal achieved 4,500,000 tonnes of sales (Industrial Development Corporation, 2012). With the success of this company, it has shown that the skill development ability of South African technocrats develops the SADC; as such there is a need to replicate this model in other countries in Africa.

The advent of Mauritius as an internationally acclaimed tax haven has attracted the most lucrative investment opportunities into this country. Following its recent rating as the best place to do business on the African continent, according to the World Bank’s Doing Business Annual Report (2012), South African MNCs have flocked into the country to explore potentials inherent in the Mauritian economy. New research carried out by the SADC (2012) concludes that in 2006, there was a huge increase in South Africa’s outward FDI to Mauritius, accounting in that year for 33% of total FDI into Mauritius. Although this FDI was concentrated in the IT and Business Process Outsourcing (IT/BPO) services sector (Draper, Kiratu and Samuel, 2010; Draper, Grant, Kingombe and Velde, 2011), there is a drive towards investment in the private non-banking sector that specifically deals in long-term capital (World Investment Report, 2012).

On an aggregate level South African MNCs have made significant investments in the banking, retailing, tourism and mining sectors of the SADC’s economy. During apartheid, Anglo American, De Beers and Rembrandt traded and invested in Africa despite international sanctions on South African businesses worldwide. With the demise of apartheid and the installation of a democratically elected ANC-led government, there has been a new “scramble for Africa” by MNCs that has led to a surge in direct investment. Most large South African companies such as Standard
Bank and SABMiller have investments in all 14 SADC countries. This has given rise to these companies controlling 70 per cent of the SADC economy. However, South African MNCs have initiated new expansion plans into other parts of Africa. For example, SABMiller has bought up major shares in the national breweries of Tanzania, Zambia and Mozambique (and are already in Botswana, Lesotho and Swaziland).

Also, some of the new investments in ICT, particularly in the GSM sector have been dominated by these companies, with investments made by MTN Group of Companies, Telkom SA and Vodacom running into billions of dollars, followed by IDC’s $600 million in Mozambique and Gencor’s $500 million in Mozambique (Carmody, 2012; Valsamakis, 2012). According to Mansfield (2011) Zimbabwean state-owned mobile network operator NetOne confirmed that it was in talks with several overseas investors about taking a significant minority stake in the company. It was anticipated that the company needed at least US$100 million in additional investment to maintain its network and catch up with its two larger commercial rivals. The plan however, was for MTN to invest part of its huge revenue pool in the company, as a strategic turnaround strategy.

An active agent of this new African “modernisation” is the South African retail multinational. South African retail companies such as Wimpy (fast food), Engen (service station), Kwikserve (mini-supermarket), Woolworths (food and clothing), Game (general merchandise) and the huge regional multinational food retailer, Shoprite-Checkers (food supermarket), are building on regional economies of scale to flood African markets with a host of new consumer goods and services sourced primarily from South Africa (Miller, 2008; Miller, Saunders and Oloyede, 2008; SARB, 2012).

According to Louw, Ndanga, Chikazunga and Jagwe (2008:3) agro-allied companies contribute 35% of the SADC’s GDP and 13% of the total export earnings of SADC countries’ external trade, constituting about 66 per cent of the value of intra-regional trade. The aforementioned studies have also observed that 80 per cent of the population in the Southern African region depend on the agricultural sector for subsistence, employment and income. The perennial success of this sector has made the country an “anchor economy” for both South African agribusinesses and international subsidiaries of foreign MNCs based in South Africa venturing into the SADC region. New studies by Miller (2008) and SARB (2012) posit that retail migration into SADC region benefited from the “pull” supporting services sectors such as property rental, banking and auditing. It was further observed that local linkages to the supply chain are highly attractive and currently unexploited in the region, and as such portend a great incentive to invest in this sector. Moreover, it was observed that there are tremendous opportunities in supermarkets, marine fisheries, cashew nuts, franchising and high value products (Statistics South Africa, 2013).
Table 2.3: South African Companies Classified by Industry Operating in the SADC Zone

<table>
<thead>
<tr>
<th>INDUSTRY</th>
<th>NAME OF COMPANY</th>
<th>HOST COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>SERVICES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fast Food Outlets</td>
<td>Steers</td>
<td>Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Swaziland, Tanzania, Uganda, Zimbabwe, Zambia</td>
</tr>
<tr>
<td></td>
<td>Chicken Lickens</td>
<td>Botswana, Zambia</td>
</tr>
<tr>
<td></td>
<td>Spar Steak Ranches</td>
<td>Botswana, Mauritius, Mozambique, Swaziland, Tanzania, Uganda, Zimbabwe</td>
</tr>
<tr>
<td>Finance (1) Banks</td>
<td>First National Bank</td>
<td>Botswana, Lesotho, Mozambique, Namibia, Swaziland, Tanzania, Zambia</td>
</tr>
<tr>
<td></td>
<td>Standard Bank</td>
<td>All 14 SADC countries</td>
</tr>
<tr>
<td>Finance (2) Insurance, Finance, Investment Banking and Asset management</td>
<td>Metropolitan Life (new Africa Investment Limited)</td>
<td>Botswana, Namibia, Swaziland</td>
</tr>
<tr>
<td></td>
<td>Korsaf Investments (new Sun International Limited)</td>
<td>Botswana, Namibia, Mauritius, Lesotho, Swaziland, Zambia</td>
</tr>
<tr>
<td></td>
<td>Makin International Investment</td>
<td>Mozambique</td>
</tr>
<tr>
<td></td>
<td>Investec</td>
<td>12 SSA countries</td>
</tr>
<tr>
<td></td>
<td>African Life</td>
<td>Botswana, Tanzania, Uganda, Zambia</td>
</tr>
<tr>
<td></td>
<td>Standard Corporate Merchant Bank</td>
<td>Botswana, DR Congo, Malawi, Uganda</td>
</tr>
<tr>
<td></td>
<td>Nedcor</td>
<td>Angola, Botswana, DR Congo, Namibia, Malawi, Mozambique, Madagascar, Mauritius, Lesotho, Swaziland, Tanzania, Seychelles (rejoining the SADC this year), Zimbabwe</td>
</tr>
<tr>
<td>TOURISM</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hotels</td>
<td>Protea</td>
<td>Tanzania, Namibia, Malawi, Uganda, Zambia</td>
</tr>
<tr>
<td></td>
<td>Southern Sun</td>
<td>Tanzania, Zambia, Mozambique</td>
</tr>
<tr>
<td></td>
<td>Sun International</td>
<td>Botswana, Namibia, Swaziland</td>
</tr>
<tr>
<td></td>
<td>Karos</td>
<td>Namibia, Mozambique</td>
</tr>
<tr>
<td>Car Hire Services</td>
<td>Avis</td>
<td>Namibia</td>
</tr>
<tr>
<td>Leisure</td>
<td>CC Africa (now &amp; Beyond Africa)</td>
<td>Namibia, Botswana, Tanzania</td>
</tr>
<tr>
<td></td>
<td>Games Africa Investment</td>
<td>Zimbabwe</td>
</tr>
<tr>
<td>RETAIL AND WHOLESALE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supermarkets</td>
<td>Shoprite Checkers</td>
<td>All SADC countries</td>
</tr>
<tr>
<td></td>
<td>Pick ’n Pay</td>
<td>Botswana, Mozambique, Zambia, Zimbabwe, Lesotho, Namibia, Mauritius</td>
</tr>
<tr>
<td>Clothing Stores</td>
<td>Pep</td>
<td>Operates in 11 SADC countries</td>
</tr>
<tr>
<td></td>
<td>Woolworth</td>
<td>Zimbabwe, Namibia</td>
</tr>
<tr>
<td>Wholesalers</td>
<td>Metro Cash &amp; Carry</td>
<td>Botswana, Malawi, Namibia, Lesotho, Swaziland, Zimbabwe</td>
</tr>
<tr>
<td></td>
<td>Edcon</td>
<td>Botswana, Lesotho, Namibia, Swaziland</td>
</tr>
<tr>
<td></td>
<td>Peaker/Metro</td>
<td>In all SADC countries</td>
</tr>
<tr>
<td>Vector Vehicles</td>
<td>McCarthy Retail</td>
<td>Botswana, Namibia</td>
</tr>
<tr>
<td>Furniture</td>
<td>JD Group (the owners of Protea Furnishers)</td>
<td>Angola, Botswana, DR Congo, Namibia, Madagascar, Mozambique, Swaziland</td>
</tr>
<tr>
<td>TELECOMMUNICATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GSM</td>
<td>MTN</td>
<td>Botswana, Swaziland, Uganda, Zambia</td>
</tr>
<tr>
<td></td>
<td>Vodacom</td>
<td>Congo DR, Lesotho, Mozambique, Tanzania</td>
</tr>
<tr>
<td></td>
<td>Telkom</td>
<td>Uganda, Namibia, Tanzania, Zimbabwe (Way: Angola, Botswana, DR Congo, Malawi, Mozambique, Madagascar, Lesotho, Zambia)</td>
</tr>
<tr>
<td>BREWERAGE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brewing and bottling</td>
<td>SAB Miller</td>
<td>All 14 SADC countries</td>
</tr>
<tr>
<td>MINING</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diamonds</td>
<td>De Beers</td>
<td>Botswana, Namibia</td>
</tr>
<tr>
<td>Iron Ore &amp; Aluminium</td>
<td>BHP Billiton</td>
<td>Angola (exploration), Mozambique</td>
</tr>
</tbody>
</table>

Source: Statistics South Africa, 2012

From Table 2.3 (above) we can deduce that South African MNCs have been very active in the SADC (World Investment Report, 2012). South African MNCs have performed well in the fast food, retail and wholesale sectors of the SADC economy.
Steers, Shoprite Checkers, Pick `n Pay, Pep and Pepkor/Metro have carried out an aggressive expansion strategy that has led to these MNCs opening branches in almost all countries within the SADC. Moreover, SABMiller (Africa’s number one brewing and bottling company) has considerably grown its business within the SADC. As a result, the company now sells about 213 million hectolitres (hl) per annum (SABMiller, 2012). In the finance sector banks such as Standard Bank, First National Bank and Nedcor have grown their balance sheet by their ambitious branch expansion programmes within the SADC. However, there is an expansion gap within the insurance, investment banking and asset management sub sector. In the mining sector, De Beers, BHP Billiton and AngloGold Ashanti remain the dominant players within the sub-region, but growing labour unrest has continued to affect the image of these companies, as exemplified by the Lonmin disaster that killed about 34 striking workers (BBC News Africa, 2012). In the telecommunications sector, although MTN and Vodacom have been able to establish businesses within the continent, its operation within the SADC needs to be expanded to cope with the rising demands in the sector. Moreover, although tourism is a major revenue earner for the country, there is a growing need for more hotels, car hire services and leisure companies to be opened within the SADC (National Department of Tourism, 2011).

According to the latest JSE (2013) factsheet data, the largest South African investment in retail is by the fast-moving consumer goods (FCMG) chain, Shoprite, operating 1730 corporate outlets with a turnover of R72bn in its last financial year. With cash resources in excess of R3.98bn, the company is now experiencing over accumulation in the South African retail market, which has necessitated Shoprite to develop a strategic plan that eventually leads to the opening of new stores in other parts of Africa (Shoprite Holdings, 2012). As at today, Shoprite has over 229 stores in 16 African countries (Shoprite Holdings, 2013) and owns Manda Hill Complex in the capital city of Lusaka, a centrepiece of Shoprite’s Zambian investment, which cost about US$20m (Miller, 2007). The parent company of this firm Pepkor is the fifth largest industrial company in South Africa. Pepkor is an important company not only in the retail sector, but the nation at large. With a turnover of over R33.5bn/$3.5bn, as well as seven groups of food, clothing and furniture stores operating in Africa, Australia and the UK, the company has prospects of being listed as a Fortune 500 company soon (Pepkor, 2013). Basson (2009) attributes the success of the firm to a remarkable team effort with absolute commitment at every level in the organisation; as a result, this working model has now been replicated by many start-up retailers in the region.

Recent studies by the SARB (2012) suggest that South African banks play an important role in regional integration. This has been clearly stated in the vision, mission and strategic statement of these companies. According to Standard Bank (2011) the company strategy is that: We aspire to build the leading African financial services organisation using all our competitive advantages to the full. With over 700 branches in South Africa and over 500 branches outside of South Africa, the bank is now strategically positioned to exploit the potentials in the SADC market, employing 49,000 people in these countries and accumulating a total asset in excess of 1, 694 billion rands thereafter (Standard Bank, 2014). In 2002, Standard Bank acquired 90% of Uganda Commercial Bank, the largest commercial bank in Uganda at that time, making Standard Bank a major actor in the banking sector of that East African country. A contemporary study carried out by the JSE (2013) observes that there is a positive link between South African multinational banks’ acquisitions in the SADC
and the exchange’s growth. This has given rise to higher revenues and profit ratios by banks such as ABSA, Nedbank, Standard Bank, Investec and First National Bank despite high-level losses that are being experienced by foreign competitors. Consequently, South African banks now have more coverage in the SADC; as such can finance big-ticket transactions.

Another recent study points to the fact that although there is a lot more competition from foreign investors in the telecommunications sector, South African telecoms companies have overshadowed these firms, by establishing more mobile, internet and infrastructural facilities where ever they operate. Consequently, companies such as MTN, Vodacom and Telkom SA have more customers than competing firms vying for these lucrative investment prospects (Statistics South Africa, 2012). Moreover, the telecommunications and finance sectors are also sectors in which South African companies have some degree of black representation, giving this newer sector a different racial profile in their African investments (Department of Trade and Industry, 2012).

Further analysis of the activities of other South African multinationals shows that they have performed creditably well in the SADC region. SABMiller has grown from its original South African base into a global company with operations in the SADC, developed markets and emerging economies. The recent financial statement of the firm indicates that the total revenue of the firm is about US$ 26.719 billion (SABMiller, 2014). In addition to the success of South African MNCs in the aforementioned sectors, these successes have also been replicated in the mining and construction sector, health and agro allied sectors of the SADC economy.

2.6 Theoretical Framework of MNCs

The 1950s and 1960s (Ietto-Gillies, 2004) saw a considerable growth in foreign direct investment and the activities of multinational companies, particularly in the manufacturing sector (Ietto-Gillies, 2012; Guy, 2009; Panitch, 2012). This resulting increase in growth levels can be attributed to American and British firms. It signalled a shift from pre-World War II FDI that was on a much smaller scale and mainly into resource exploitation. After WWII much international production was in manufacturing and embodied the results of research (Helpman, 2011; Panitch, 2012). However, with the spread of globalisation it became imperative for the service industry to grow across borders in telecommunication, banking, as well as in Information and Communications Technology (ICT) (Ietto-Gillies, 2012).

Shah, Yusaff, Hussain and Hussain (2012) defines a multinational company as a business enterprise that retains direct investments overseas and maintains value-added holdings (Spero and Hart, 2003:2010) in more than one country. He further emphasises that the Product-life Cycle Theory propounded by Vernon (1966) explains the tendency of multinational companies to move from exporting to undertaking foreign direct investments in overseas production to service foreign demand. This theory goes on to prove that firms invest abroad when their main products become "mature" in domestic markets (Spero and Hart, 2003:2010).

According to Oatley (2001) multinational corporations are at the intersection of production, international trade, and cross-border investment. MNCs are thus observed to have two characteristics. First, they coordinate economic production among a number of different enterprises and internalise this coordination within a
single firm structure. Second, a significant portion of the economic transactions connected with this coordinated activity take place across national borders.

Studies reinforce the idea that MNCs have become successful drivers of economic development (Steers, Sanchez-Runde and Nardon, 2010; Giuliani and Marin, 2011) principally as the aid productive linkages that are associated with the generation of technological externalities (Blomstrom and Kokko, 1998). Görg and Ruane (2000:218) contend that in developing countries “inter-firm linkages can have positive effects on the economy through the emergence of externalities, which result in the expansion of output of sub supplier firms in response to the establishment of new manufacturing firms”. In the same vein, Belderbos et al. (2001:190) stressed that backward linkages “are associated with frequent information flows, which allow for quality improvements, reduced delivery times, and fast upgrading of designs in response to changing demand conditions for final products” (Leoncini and Montresor, 2008).

By contrast, some studies suggest that the downside of MNC operations are their “crowding out” effect on the existing domestic firms, out-competed by more efficient and technologically advanced foreign affiliates. However, these MNCs may also spur surviving domestic firms to improve their productivity (Kumaraswamy, Mudambi, Saranga and Tripathy, 2012). However, another school of thought observes that MNC subsidiaries may more directly generate technological externalities through the “leak out” of relevant knowledge (Blomstrom and Sjoholm, 1999), which may eventually enhance domestic firms’ technological capabilities (Lall, 2001) and allow them to achieve efficiency gains.

A recent study by Silvius (2008) indicates that MNC Business and IT Alignment (BIA) does not seem to live up to its promise, so also, do many aspects of the operations of these companies. Another negating factor associated with the growing influence of MNCs is that they intentionally set the standardisation strategy (Pudelko and Harzing, 2007) in various countries where they operate either to keep their businesses afloat, to the detriment of local industries or the standards are set at high rates in some countries and ridiculously low in developing countries.

According to Guiliani (2011) multinational companies are able to penetrate into various markets by a combination of strategies, either by using Greenfield investments (when opening a new operation) or Brownfield investment (through expansions or re-investment in existing foreign affiliates or sites). Also, contemporary multinational companies can be formed either through mergers and acquisitions (M&As), or through privatisation and equity investment that usually appears as new forms of investments such as joint ventures, strategic alliances, licensing or as venture capital.

Critics of neo-colonialism also argue that investment by multinational corporations enrich few in underdeveloped countries, and cause humanitarian, environmental and ecological devastation to the populations which inhabit these neo-colonies (Marzouk, 2012). It has been argued by scholars like Mthombeni (2006) and Korowicz (2012) that this results in unsustainable development and perpetual underdevelopment; a dependency that cultivates those countries as reservoirs of cheap labour and raw materials, while restricting their access to advanced production techniques to develop their own economies. They also noted that in some countries, privatisation
of national resources, while initially leading to immediate large-scale influx of investment capital, is often followed by dramatic increases in the rate of unemployment, poverty, and a decline in per-capita income.

According to the “convergence hypothesis” multinational companies tend to displace national firms and trade as total market size increases, and as countries converge in relative size, factor endowments, and production costs (Barrios, Görg and Strobl, 2003; Talamo, 2010; World Trade Report, 2013). Kutner (2002: A1) argued that there is a very serious case not against “globalisation”

...But against the particular version of it imposed by the world's financial elites (MNCs). The brand currently ascendant needlessly widens gaps of wealth and poverty, erodes democracy, seeds instability, and fails even its own test of maximising sustainable economic growth.

According to Todaro (2003), the Gini computation indicates that white South Africans (who are offshoots of multinational companies) score on the HDI is roughly equivalent to that of Spain, while that of the black (highly unskilled) ethnic majority is similar to that of Congo-Brazzaville (Todaro and Smith, 2012). This argument supported by Klaveren, Tijdens, Hughie-Williams and Martin (2009) when they agreed with the findings of the UN Human Development Report in 1994. Their study also concluded that if “white” South Africa were a separate country, it would rank 24th out of 180 countries, while “black” South Africa would rank 123rd.

A recent study by Tan and Wang (2011) however observed that the operations of MNCs introduces new modes of business practices to developing countries by spreading a set of universal organisational patterns and business ethical standards (De George, 1993; Tan and Wang, 2011). A recent example of this line of research carried out by Kwok and Tadesse (2006) found that the presence of MNCs over the past four decades reduced the level of corruption in their host countries. In similar studies, the findings of most researchers such as Ngongang (2008), Anyanwu (2012), Carmody (2012) and South Africa Info (2013) are that the entry of South African MNCs into sub-Saharan Africa reduces the incidences of war, bribery and corruption that have crippled the economy of these countries. This leads us into a discussion on the orientation of MNCs.

Perlmutter’s (1969) ethnocentric, polycentric and geocentric (EPG) model states that senior management at an international organisation holds one of three primary orientations when building and expanding the multinational, and this generally describes the type of MNC (Rugman and Hodgetts, 2002). The letter “e”, which stands for “ethnocentric”, refers to MNCs that have home country orientation. According to Aswathapa (2010) MNCs with an ethnocentric orientation relies on the values and interests of the parent country in formulating and implementing a strategic plan. The primary focus of this kind of firm centres on profitability, moreover, the firm runs its operations overseas in the same way.

The second letter “p” stands for the MNC’s polycentric disposition of host countries. An MNC with a polycentric predisposition tailors its strategic plan to meet the needs of the host country’s culture and local demand. However, profits are more likely to be ploughed back to the host country for expansion and the growth of business operations. Consequently, this strategy falsifies the one-size-fits-all notion of ethnocentric orientation (Perlmutter, 1969). However, the drawbacks of this attitude
are that they limit career mobility for both local and foreign nationals, isolate headquarters from foreign subsidiaries and reduce opportunities to achieve synergy.

In addition, Perlmutter’s letter “g” stands for the geocentric world orientation of MNCs. According to Aswathapa (2010) MNCs with a geocentric approach view operations from a global perspective. Such firms offer global products with local variations and their employees belong to different countries. This type of MNC recruits the best people, notwithstanding their region or religion. The finding of Schenk (1988) concludes that US multinationals are the most geocentric in the world. It has been proven that this strategy has made them the most successful companies in the world.

In 1979 Perlmutter and Heenan added a new letter to the EPG model to create the EPRG model. The letter “r”, which stands for the regiocentric predisposition of multinationals, was added as a result of increased globalisation and integration of world markets. An MNC with a regiocentric predisposition would be interested in both profit and public acceptance; an acceptance precondition of both ethnocentric and polycentric orientations. These firms use the best strategy that allows them to address both local and regional needs. A good example is that an MNC doing business in the SADC instinctively becomes interested in all its member countries; notwithstanding the colour, race or financial standing of their economies.

The downside of this categorisation of the types of MNC is that in a real world these orientations never occur in pure form. According to Madura (2014) there is no MNC that truly has one management style that is based on these models. As a result of this gap in classification of MNCs, some notable scholars have been able to come up with a new way of distinguishing MNCs, based on corporate structure. Saxena (2009) and Paul (2010) are of the view that multinational companies are of three types, namely;

1) Horizontally integrated MNCs that manage production establishments located in different countries to produce the same or similar products. An example of this kind of MNC is McDonald’s.

2) Vertically integrated MNCs that manage production establishments in certain country/countries to produce products that serve as input to its production establishments in other country/countries. Adidas is an example of this type of MNC.

3) Diversified MNCs that manage production establishments that are located in different countries that are neither horizontally nor vertically nor straight, nor non-straight integrated. Examples of this kind of MNC are Microsoft, Siemens A.G.

2.6.1 Theories of Multinational Enterprises (MNEs)

Research on multinational companies’ operations and management has continued to trigger debate among scholars; this has given rise to different theories. Gravino (2011) observes that MNE theory is important because it studies the three variables that affect most economies worldwide. He went on to state that the transition between FDI and trade growth has been mainly influenced by multinational companies, and has continued to determine the progression of gross domestic product (GDP) growth and balance of payment (BOP), as well as, employment levels. Moreover, the theory of MNE is relevant because it explains the causes and
consequences of parent country job and export losses, and host country positive 
spillover which affects/employment competition (World Investment Report, 2013).

According to Hennart (1982) progress in our understanding of why MNEs exist has 
been slow because answering the question requires the understanding of a firm as 
one of many alternative social institutions that endeavour to organise economic 
activities... because many scholars interested in firms do not see them as 
alternatives to markets. In the 1960s International Trade Theory was used to study 
MNE/FDI where it only recognised the FDI as a component of the long-term capital 
section in the balance of payment. The existence of MNEs was explained by 
international differences in interest rates. One incidence however, changed the 
direction of scholarly works: Hymer's (1976) published PhD thesis questioned the 
differential rate of return hypothesis and triggered new research in MNE theory.

Rugman, Verbeke and Nguyen (2011) posit that as the field of international business 
has matured, there have been shifts in the core unit of analysis. First, there was 
analysis at country level that concentrated on the country specific advantages 
(CSAs), using national statistics on trade and foreign direct investment (FDI). Next, 
the focus shifted to the multinational enterprise (MNE) and the parent's firm specific 
advantages (FSAs); that are required to offset the liability of foreignness (LOF) when 
operating abroad. Eventually the MNE was analysed as a network and the subsidiary 
specific advantages (SSAs) became the unit of analysis, as it is required to offset the 
liability of outsidership (LOO) (Johanson and Vahlne, 2009).

It is however important to note that FSAs may be confronted by some challenges 
due to compounded distance problems, and also hindered by resource 
recombination when MNEs operate across national borders (Rugman, Verbeke and 
Nguyen, 2011). An essential condition successful MNEs must therefore meet in 
order to succeed in international business then becomes how these firms combine 
interdependencies in such a way that they can be easily transferred across locations 
at low cost, deployed and profitably exploited, with only limited need for resource 
recombination (Rugman et al., 2011).

2.6.1.1 Trade Theories

As stated earlier, the reason for the evolution of MNEs before Hymer's thesis was 
that the existence of MNEs could be explained by international differences in interest 
rates (Hennert, 1982). According to Hymer, market imperfections are structural, 
arising from structural deviations from perfect competition in the final product market. 
Due to exclusive and permanent control of proprietary technology, privileged access 
to inputs, scale economies, control of distribution systems, and product 
differentiation, international differences allow MNEs to seek new markets abroad 
(Pitelis and Sugden, 2000).

As time went on, Anderson's (2008) notion of international trade theory became 
prominent. He stated that the theory provides explanations for the pattern of 
international trade and the distribution of gains from this trade. The findings of his 
study suggest that multinational companies are driven to invest in foreign countries 
due to comparative advantage\(^2\) as typified by the Heckscher-Ohlin theorem\(^3\) (Jones,

\(^2\) The essence of comparative advantage theory remains that trade is due to differences in relative prices that would obtain in 
the absence of trade, and an average of each country’s citizens gain from such trade. Ricardo explained comparative 
advantage as a resultant effect of differences in labour productivity.
2006:2007), the absolute advantage fallacy\(^4\), as well as endogenous advantage exemplified by economies of scale\(^5\), bilateral trade patterns\(^6\), and the division of the gains from trade\(^7\).

Hymer (1976), Kindleberger (1969) and Caves (1996:2007) further observed and put forward the idea that MNEs owe their existence to market imperfections (Mondliwa and Roberts, 2013). These market imperfections were, however, structural imperfections in markets for final products (Pitelis and Sugden, 2000: 74). The deconstruction work of Kodiyat (2009: 20) was conversely of the view that it was Hymer’s movement towards an analysis of the MNC based upon industrial organisation theory that prompted him to come to the conclusion that:

> For firms to own and control foreign value-adding activities they must possess some kind of innovatory, cost, financial or marketing advantages – specific to their ownership – which is sufficient to outweigh the disadvantages they face in competing with indigenous firms in the country of production.

Despite the genius of Hymer’s research, trade theory ignores intra-firm transactions, transaction cost and the fact that the market is not necessarily the most efficient way of organising resources. The lapse of this theory has necessitated further research to investigate the significance of micro-organisational costs and benefits, as well as the growing mobility of firm-specific assets and the role national governments play in macro organisation of economic activity (Pitelis and Teece, 2010). Advancements would have been made by Hymer if not for his untimely death in an auto accident shortly after the completion of his thesis. However, several researchers elaborated on his work. Teece (2006: 124) is of the view that:

> Understanding the economic function of the multinational enterprise remains a seminal issue. Hymer initiated serious scholarly inquiry into the theory of multinational enterprise by positing that domestic firms needed special advantages to go global and succeed. However, he failed to fully unlock the foundations of the posited special advantages. Moreover, he sensed that multinational firms could not exist in a (theoretical) world of perfect competition, and wrongfully concluded that pernicious market power must be associated with the overseas activities of the multinational enterprise.

### 2.6.1.2 Industrial Organisation Theories

The trade theory of the MNE completely changed the focus from the nation to the firm. Hymer considered what happened in a world of segmented national markets dominated by home-grown monopolists when lower transportation costs and trade

\(^3\) The Heckscher–Ohlin Theorem states that countries export those commodities which require for their production, relatively intensive use of those productive factors found locally in relative abundance. Two countries are engaged in free trade with each producing the same pair of commodities in a purely competitive setting, supported by constant returns to scale technology that is shared by both countries (Jones, 2006).

\(^4\) Absolute cost advantage appears to imply that a nation imports goods that are cheaper abroad and exports goods that are more expensive abroad.

\(^5\) Many goods are traded because they are simply unavailable from local production. Some kinds of availability are exogenous to the interaction of nations – diamonds and oil are found only in a few locations. Endogenous availability is in contrast driven by advantage arising from the economic interaction of nations. This theory focuses on endogenous advantage resulting from economies of scale.

\(^6\) The economic theory of gravity complements the preceding models by providing an explanation for bilateral trade (Anderson and Wincoop, 2004). The model is based on four assumptions: expenditure on goods from all sources is equal to income from sales to all sources, markets for all goods cleared, and, more restrictively, each country or region produces a unique good and all countries have the same tastes for goods.

\(^7\) Most policy intervention with trade is explained by the multinationals’ desire to alter the distribution of gains either by ploughing back profits to their home countries or to their shareholders.
barriers brought two such monopolists into contact. He argued that competition between those two firms would generate (pecuniary) externalities, which may involve the merger of the firms, or the acquisition of one by the other. Thus the creation of a firm whose activities spans two countries, and the internalisation of MNEs explain how MNEs are created (Hennart, 2001).

The study of industrial organisation theories therefore exposes the limitations of the perfectly competitive model. Since features of real-world frictions such as limited information, transaction costs, costs of adjusting prices, government actions, and barriers to entry problems experienced by new firms entering into a market may be associated with MNE entry into new markets, because real-world markets are imperfectly competitive (Boccard, 2010).

According to Shy (2008) the industrial organisation theories can be better appreciated if the researcher understands the market structure that multinationals trade in (Buckley and Casson, 2009). Also, mergers, advertising, pricing and marketing tactics affect modern organisations in a variety of ways that explain the nature of ownership advantages. This may arise from the possession of particular intangible assets or from the ability of a firm to coordinate multiple and geographically dispersed value-added activities that captures the gains of risk diversification (Dunning and Lundan, 2008). Hymer's thesis, subsequently, triggered a stream of literature that observes the foreign forays of MNEs as manifestations of oligopolistic reaction (Hennart, 2001).

2.6.1.3 Transaction Cost/Internationalisation Theories

Transaction costs/internalisation theory of the MNE posits that in contrast to Hymer's pecuniary externalities, internalising these pecuniary externalities is a positive sum game in which both producers and consumers gain (Buckley and Casson, 1976; Rugman, 1981; Hennart, 2001). Transaction cost theories thus seeks to explain why MNEs organise international interdependencies that could also be handled by markets.

According to Buckley and Casson (2009) two distinct forms of internalisation have been identified: operational internalisation, involving intermediate products flowing through successive stages of production and the distribution channel; and knowledge internalisation – the internalisation of the flow of knowledge emanating from R and D. Rugman and Verbeke (2003) observe that in an international context, the MNE primarily pursues three goals, namely maximisation of the efficiency of current operations, risk reduction and learning, and can use three means to achieve these goals, namely scale economies, scope economies and the exploitation of national differences. To sum up, Buckley (1988: 181-182) is of the view that internalisation (transaction) theory holds that:

(1) Firms choose the least cost location for each activity they perform, and (2) firms grow by internalising markets up to the point where the benefits of further internalisation are outweighed by the costs.

The following paragraphs investigate the application of transaction cost theory to the multinational firm.
2.6.1.3.1 Know-How

Know-how developed in one country is often potentially useful in others, and can be transferred at low marginal cost. Buyers and sellers of knowledge therefore form an MNE and put their behaviour under the control of a central party charged with maximizing their joint income (Hennart, 2001). It therefore means that it is not know-how advantages that are being internalised by MNEs, but markets for know-how.

2.6.1.3.2 Reputation

As in the case of knowledge, a reputation developed in country A can sometimes be profitably exploited in country B. Researchers observe that such sharing of reputation can be organised through franchising contracts or within an MNC (Venkatesan, 2013). Franchising contracts typically stipulate that agents pay a royalty on sales for the use of the franchiser’s trademark (and ancillary business know-how) and agree to subject themselves to the franchiser’s behaviour constraints. Findings of Hennart’s (2001) research however, show that free riding is the main problem with franchising.

In most developing countries, franchisees can maximise their income by reducing the quality of the goods they sell that bear the franchiser’s trademark. Multinational companies in the service industry use reputation as a basis of entry into various markets, especially in the fast foods, hotels, employment agencies, car rentals, banking, advertising, management consulting and legal agency (World Bank, 2012).

2.6.1.3.3 Raw Materials and Components

Many of the interdependencies involving raw materials and components are handled by international spot markets or by long-term procurement contracts. In some cases, however, organisation of these interdependencies within MNEs is more efficient (Elms and Low, 2013). US steel companies, which have been vertically integrated into iron ore mining use specialist companies to run their captive iron ore mining operations, because they do not have much experience (and hence probably zero advantages) in this business.

2.6.1.3.4 Distribution and Marketing

Selling a product in a foreign market generally requires physical (warehouses, inventories, repair facilities, transportation equipment) as well as intellectual investments in sales people to demonstrate and present the company’s product. These investments can be small and “general purpose” or large and specific to a particular manufacture (Rugman, 2008). Sometimes the integration of manufacturing and distribution activities within an MNE becomes the best solution as exemplified by SABMiller in the beverage industry in South Africa. Also, the fact that most companies in the food industry like Shoprite and Park ’n Shop have integrated backwardly into farming guarantees quality and yields, as well as more profit on a long-term basis for these firms (UNCTAD, 2011).

2.6.1.3.5 Financial Capital

The view that financial capital raised in one country can often be profitably invested in another is consistent with observations made by trade theorists (Rodrigue,
Comtois and Slack, 2013). Due to the risks associated with lending, borrowers have adopted the following strategies:

1. They lend to borrowers and projects with which they are familiar
2. They control how their funds are used, and/or
3. They ask for collateral.

However, these three strategies tend to prevent many good projects from being funded, especially if borrowers and lenders reside in different countries and are thus not personally acquainted. The second strategy only works if the lender knows the borrower's business, while the third strategy means that projects with poor collateral do not get funded (Rugman, 2008).

In other words, when domestic and international markets for loanable funds are characterised by high transaction costs (because of information asymmetry between lenders and borrowers and the lack of collateral), the solution turn out to be for lenders and borrowers to be joined within a firm, i.e. for lenders to become co-owners of the venture, or for borrowers to raise their funds (Hennart, 2001). Then MNEs, rather than seeking bank loans or buying bonds, alternatively, uses transferred financial capital across countries to finance their investment projects. A notable example is the merger of Rand Merchant Bank Holdings and Anglo American Corporation, which created the First Rand Group, who are the majority shareholders of First National Bank (First National Bank, 2013).

2.6.2 Theories of Foreign Direct Investment (FDI)

The introductory chapter of this study described FDIs as the lifeblood of MNCs (Aregbesola, 2008). Most of the theories of MNEs are intertwined with the theories of FDIs; as such this causes a lot of controversies regarding issues of distinction between the two great influencers of globalisation. Yang (2009) traced the origins of several classical FDI theories and discovered that since the emergence of multinational companies, the meaning of FDI has changed a lot. Among all the FDI theories, six are relatively significant and are thus discussed below:

2.6.2.1 Monopolistic Advantage Theory

Hymer (1976) propounded the theory of monopolistic advantage. His theory demonstrates that foreign direct investment occurs largely in oligopolistic industries rather than in industries operating under near-perfect competition (Mir, 2011). He put forward a microeconomic approach that stresses the role of the individual firm as the main determinant of international flows of goods and capital. His explanation of foreign direct investment extended the portfolio investment approach by emphasising that an element of control over the acquired assets can lead to higher returns than could be expected (Bürgel, 2000).

According to Feenstra and Taylor (2011) the direct investor is a monopolist or, more often, an oligopolist in product markets. Due to the existence of market imperfections, local firms, creating quasi-monopolies, cannot easily purchase the advantages possessed by multinational firms. Under such conditions, foreign direct investment by MNCs is extremely lucrative, as it provides control over resources in foreign locations and a level of monopoly power vis-á-vis local competitors.
Consequently, MNCs are able to acquire monopolistic rents and profits that exceed the costs and disadvantages of competing internationally (Gueorgiev, Malesky and Jensen, 2011).

Some of the major criticisms of the theory are that it fails to address how the monopolistic advantages occur, why it is static in nature, and why it assumes a large firm going international for the first time. Also, the use of the term monopolistic to describe firm advantages may be inaccurate (Wang and Zhang, 2008).

2.6.2.2 Product Life Cycle

Vernon (1966) based on the process of product lifecycle, proposed the theory that monopolistic advantage differ with the change of product lifecycle. So, if multinationals lay down management strategy according to this cycle and then make an investment; it yields an excellent result (Yang, 2009).

![Figure 2.3: International Product Life Cycle (Source: Vernon, 1966)](image)

The product’s life cycle or period usually consists of five major steps or phases: product development, product introduction, product growth, product maturity and finally product decline (Davidson, Achtenhagen and Naldi, 2010; Sharma, 2013). From Figure 2.3 we can deduce that since developed markets are experiencing declines in their productivity, it becomes right for South African MNCs to penetrate Africa’s less developed markets, especially the geographically close and economically integrated SADC region (Miller, 2008; DTI, 2011).

Vernon was of the view that it is ideal to separate the production and marketing of a new commodity into three steps, namely:
(1) New product phase: here the IPLC begins when a company in a
developed country wants to exploit a technological breakthrough by launching
a new, innovative product on its home market (Sihabutr, 2012).

(2) Maturing product phase occurs when exports to markets in advanced
countries further increase over time, making it economically possible and
sometimes politically necessary to start local production (Kutshi and Vishnu,
2010).

(3) Standard product phase: during this phase, the principal markets become
saturated. The innovator's original comparative advantage based on
functional benefits has eroded. The firm begins to focus on the reduction of
process cost rather than the addition of new product features. Consequently,
the product and its production process become increasingly standardised
(Carbaugh, 2012).

The problem with IPLC is that in reality very few products follow such a prescriptive
cycle. The length of each stage varies enormously. The decisions of marketers can
change the stage, for example from maturity to decline, by price-cutting. Moreover,
not all products go through each stage. Some go from introduction to decline, also, it
is not easy to tell which stage the product is in. Conventionally, new research
findings suggest that as a product went through its life cycle the least profitable
functions were relocated to lower costs locations, notably in developing countries
(Rodrique, Comtois and Slack, 2013). A major critic of the theory is Komninos
(2008), who stated that in a normal case of cannibalisation (Debruyne, 2013), an
improved version of a product could replace an existing product at any stage of the
IPLC due to innovations and technological and marketing improvements (Kim and
Mauborgne, 2013).

2.6.2.3 Theory of Comparative Advantage

Adam Smith (1776) first wrote on the idea of comparative advantage, when he
reiterated that if a foreign country can supply us with a commodity cheaper than we
ourselves can make it, better buy it from them with some part of the produce of our
own industry, employed in a way in which we have some advantage. This explains
the reason behind the existence of MNCs and FDIs worldwide. Similarly, Ricardo
(1817) formulated the law of comparative advantage, and was of the view that free
trade between two or more countries can be mutually beneficial, even when one
country has an absolute advantage over the other countries in all areas of
production, as long as they have different relative efficiencies (Rugman, Verbeke
and Nguyen, 2011). Both scholars predisposition with classical economics helped to
formulate a fundamental discuss on both the nature, factors, advantages and
alternative or relative opportunity MNCs provoke in the study of FDI (Chang, 2008).

According to Dahlman (2007) a country’s FDI should start with the weakest part of its
industries, so that the comparative advantage of both the investing country and the
host country becomes fully released and beneficial to both nations (Baumol and
Binder, 2009; Krugman, 2011). Comparative advantage, whether driven by
technology or factor endowment, is at the core of neoclassical trade theory (Costinot,
2009). Ozawa (2007) however, suggests that the major limitation of the theory of
comparative advantage is its failure to see that the doctrine applies as equally to FDI flows as to trade flows (Ozawa, 2007).

2.6.2.4 Internationalisation of Market Theory

Buckley and Casson (1976) established the internalisation of market theory from natural market imperfection. It explains the rise of modern MNCs and the phenomenon of FDI. This theory is considered a milestone in explaining the nature and origin of MNCs, and the various types of FDI (Andersson and Wang, 2011). According to Chen (2005) the internalisation theory suggests that multinational enterprises set up subsidiaries to exploit technology advantages abroad when licensing is too difficult to arrange with indigenous firms (Dunning and Lundan, 2008). The essence of internalisation theory is the acknowledgement of imperfection within the market, which prevents the efficient operation of the international market and encourages the production of intermediate products for consumption by foreign markets (Kalfadellis and Gray, 2002; Wahab, Rose and Osman, 2012).

2.6.2.5 International Product Eclectic Theory (IPET)

The International Product Eclectic Theory (Dunning, 1980: 1981; 2010; Dunning and Lundan, 2009) is a theory in international business that is also known as the OLI-Model (Rugman, Verbeke and Nguyen, 2011). John H. Dunning in 1980 attempted to combine the doctrine of “structural market imperfection” and the doctrine of “natural market imperfection” to find a more general theory frame to explain how multinationals form and what the phenomenon of FDI is (Yang, 2009). Although, the theory of internalisation itself is based on the transaction cost theory, this theory says that transactions are made within an institution if the transaction costs on the free market are higher than the internal costs, which refers to the process called internalisation (Anthony, 2010).

For Gravino (2011), it is not only the structure of the organisation that is important. Three additional factors influence an organisation, namely ownership advantages: (trademark, production technique, entrepreneurial skills, returns to scale); location advantages (existence of raw materials, low wages, special taxes or tariffs); and internalisation advantages (*i.e.* advantages of owning production rather than producing through a partnership arrangement such as licensing or a joint venture) (Lewandowski and Rafalska, 2013). The limitation of the theory is that the level of each country’s economic development is different, which becomes clearer with the change of the world economic environment and the upgrade of scientific technology (Tang, 2012).

2.6.2.6 New Generation FDI Theory

According to Yang (2009) the new theory and investigation of FDI may include seeking for what real advantage is inside an MNC that motivates it to convert resources in order to compete in an unacquainted foreign country. The theory is thus used as a basis to uncover why FDI is an easy way to improve the welfare of both the host country and parent country (Rugman, Verbeke and Nguyen, 2011). And lastly, discovering how FDI brings positive and negative effects to both the host country and parent country.
The critics of international free trade from the perspective of increasing returns to scale observe that it might be effective for a nation to shelter infant industries until they had grown to a size large enough to compete internationally (Shiozawa, 2007; Ottaviano, 2011). The Heckscher-Ohlin model (Heckscher, 1954; Ohlin, 1967) assumption that labour mobility between industries is possible while capital is immobile between industries in the short-run, fundamentally makes it important for labour to move freely from one area of surplus to an area of deficiency within the SADC, an essential prerequisite for a seamless regional integration (SADC, 2012).

2.7 The Concept of MNCs

As a result of the liberalisation of international economic transactions in recent decades and improved communication technologies, global competition has intensified. This trend puts considerable pressure on firms to internationalise (Economic Intelligence Unit, 2007). According to the UNCTAD (2007) the unprecedented efforts geared towards trade liberalisation and the openness of economies to international competition have resulted in the increase of both the stock and flow of foreign direct investment by multinational companies worldwide.

According to a report of the International Labour Office (2007) "the essential nature of multinational enterprises lies in the fact that its managerial headquarters are located in one country while the enterprise carries out operations in a number of other countries as well" (Shah, Yusaff, Hussain and Hussain, 2012). The major characteristics of MNCs that distinguish them from other firms are that they are considerably larger, operate worldwide with a centralised control, they use sophisticated technology that is managed by professionals and sell their products to international markets, that have high brand equity and loyalty.

2.8 The Growth of MNCs

According to the Economist Intelligence Unit (2007: 67):

MNCs are motivated to establish a portfolio of locational assets to secure competitive advantage. They are driven to invest abroad to have better access to resources (including skills and technology) and to be close to their markets. No wonder, then, that the number of MNCs has multiplied in recent decades (the total number of MNCs in the world is about 80,000). The pressures of globalisation will continue to drive firms to invest abroad to develop their own portfolios of locational assets, driving up global FDI.

As a result, multinational companies continue to drive up global FDI flows from $1.2 trillion in 2010 to about $2 trillion, largely due to cross-border mergers and acquisitions and investments in greenfield projects. This development has triggered foreign affiliates’ share in global gross domestic product (GDP) to reach an historic high of 11 per cent (World Investment Report, 2010).

The IMF (2013) disclosed that the total volume of exports worldwide is steadily increasing due to a rebound by the least developed countries. Furthermore, recent trends indicate that multinationals from BRICS countries have caused this push in global production and services (United Nations, 2014).
According to Mazlish (2012) the growth of MNCs takes the shape of a J curve. This new finding remains a strong basis for analysing MNC and FDI contributions in the global economy. In recent decades, MNCs’ foreign trade has grown much faster than the GDP of many countries (Feinberg and Keane, 2006; Ahearn, 2011). World Investment Report (2012) observes that MNCs have grown from a total of 35,000 globally in 1990 to about 82,000 in 2011. Moreover, the foreign affiliates of MNCs have also grown from 150,000 in 1990 to 810,000 in 2011 (see Figure 2.4). However, the most significant contribution of MNCs in the global economy is their facilitation of the outflow of FDIs to foreign countries where they have been sought after to help develop trade and manufacturing.

In 1990 total FDI outflow was 1.7 trillion dollars, and it aided global sales from foreign affiliates of about $5.1 trillion. However, in 2012 this figure had grown from $21.2 trillion for total FDI outflow, and generated global sales from foreign affiliates of about $27.9 trillion. Also, global exports of goods and non-factor services grew from $4.2 trillion in 1990 to about $22.1 trillion. A recent study carried out by the OECD (2012) suggests that MNCs’ record on employment growth has been mixed across sectors and business cycles, and has grown from about 24 million in 1990 to about 69 million in 2012. From Figure 2.4 we can deduce that MNCs growth, outflow FDI, global sales, export statistics and employment rates fell during the oil boom of the early 1990s, the Asian financial crises of 1997, the 2001 global economic recession and also during the 2008 global financial crisis, as well as during the European sovereign debt crisis of 2009. However, MNCs have been able to come back after every recession by contributing to economic recovery (World Bank, 2012).

The growth of MNCs is as a result of the expansion of their operations across international borders to raise long-term returns on investment. Most MNCs invest abroad due to the saturation of local markets, resources deficiency and to seek efficiency in order to lower cost of production. Also, they sometimes invest abroad to
seek key supplies, for example aluminium companies moved to invest in Mozal Aluminium in Mozambique, in a similar manner, SASOL, an oil and chemical company, wants to open up new fields in Ghana, Nigeria, Brazil, Canada and Venezuela (Hamilton and Webster, 2012).

According to Orakzai (2006) MNCs have had major improvements in information technology and communications that now allow them to have businesses all over the world. These advances include cross-continental travel, telecommunications, systematic production methods (such as assembly lines), improved banking systems and the efficient use of the internet. Today, MNCs occupy a powerful position in the global economy, accounting for two-thirds of international trade (UNCTAD, 2011).

2.9 Importance of MNCs

This section discusses the numerous roles MNCs play in both national and regional economies. MNCs facilitate international linkages through capital movements in the form of FDIs (Tambunlertchai, 2009). In the process of facilitating cross-border linkages these companies also facilitate capital movements by their international lending and borrowing (World Economic Outlook, 2012) which helps in the capital formation process.

MNCs have constituted a major channel for technology transfer to developing countries (Statistics South Africa, 2012). While new technologies extend to various industries and applications, five categories are considered to have the most impact on all economies: electronics and informatics, which includes development in computers, telecommunications, software; new materials; biotechnology as well as genetic engineering; and also, new and renewable energy technologies (Vergragt, 2006).

South African MNCs have played a critical role in the development and application of new technologies in various fields. In the telecommunications sector, for example, the investments of MTN, Telkom and Vodacom have helped to increase the teledensity of the SADC and Africa as a whole. Similarly, the offshore assembly activities of MNCs in South Africa have led to technological diffusion in the mining sector across the SADC (Friedman, 2012; Valsamakis, 2012).

Multinational companies have often invested heavily in infrastructural development, due to deplated amenities in most LDCs. In some instances, manufacturing companies are faced with the problem of poor transportation networks, making it difficult to distribute goods to their target market (Prahalad, 2006; Doole and Lowe, 2008). Consequently, most MNCs as a corporate social responsibility construct roads, classrooms, and install power generation facilities in the interest of both the host community and the company. Furthermore, South African MNCs have also helped in the funding of moribund companies by injecting FDIs into privatised and liberalised State Owned Companies SEOs across the SADC region (World Investment Report, 2013).

According to Newlands and Hooper (2012: 18) the combined sales of the top 200 MNCs are bigger than the combined economies of all the countries of the world, minus the largest ten. The income of MNCs is eighteen times higher than the combined annual income of the 1.2 billion people of poor countries (24 per cent of the total world population). Their study found that the growth of sales of top 200
corporations is faster than that of overall global economic activity (Anderson and Cavanagh, 2000; Ellis, Fitchett, Higgins, Jack, Lim, Saren and Tadajewski, 2011). Further analysis shows that between 1983 and 1999, MNCs’ profits grew by 362 per cent whereas their combined sales grew from 25 per cent to 27.5 per cent of the world GDP and employs about 1.2 billion persons worldwide, either directly or indirectly through ancillary companies (World Investment Report, 2012).

2.10 MNC Activities in Various Sectors of the Economy

MNCs’ investment is seen as a linear trajectory of the development of South African capital from primary (mining) to secondary (manufacturing) and then to an increasingly tertiary economy (e.g. finance, telecoms, tourism). Between 1990 and 1996 more than 30 companies announced investment plans in SADC countries to the value of about R9 billion according to BusinessMap (2005), a Johannesburg policy information and research group. This investment was located in various sectors – mining, agriculture, banking, retail, telecommunications, textiles, food processing, electricity, construction and tourism. Anglo American, Engen, Standard Bank, South African Breweries, Illovo Sugar, Sun International, Shoprite Checkers, Billiton, Eskom, and Steers were among the South African companies that exploited potential market opportunities within the SADC (World Investment Report, 2010).

The UNCTAD (2005: 5) study, prepared on outward foreign direct investment by enterprises from South Africa says:

> The number of South African companies doing business in Africa has more than doubled in a decade since 1994 and by the beginning of 2005, 34 of the top 100 JSE-listed companies had 232 investment projects in 27 African countries, employing 71,874 people...More than 22 per cent of FDI flows received by the Southern African Development community (SADC) in 1994-2004 were from South Africa, with the share in some years exceeding 40 per cent.

From the aforementioned, MNCs in South Africa have the potential to be an economic engine that pulls Africa into a prosperous and exciting future (Labour Research Service, 2011). Behind this newfound South Africanism, however, lie the real business imperatives to secure regional markets and strategic resources and, where profitable, purchase and expand productive enterprises, like for example, SAB’s (now SABMiller) acquisition of beer companies in the SADC region which were clearly profit-driven. The spurring idea is that capitalist accumulation in South Africa and by implication the SADC region is based on a cheap labour system, which is undeniable but thriving. In this way, it is anticipated that the highly contentious issue of unemployment becomes reduced. Furthermore, it significantly improves the productivity level and the disposable income of host countries, as it has been proven that capitalist systems effectively and efficiently distribute wealth (Patel, 2006).

MNC activities in various sectors of the economy have come with some challenges. Blade Nzimande (2006), general secretary of the South African Communist Party, notes that from proceedings on his recent visit to Zambia, that South African capital is seen as predatory in its operations. Although it's only natural for South African capital to be viewed objectively as acting for sub-imperialist power, it is obviously clear that with a huge debt profile amounting to $208 billion, most of the SADC countries are not able to finance huge budget deficits, mitigate deepening poverty, at the same time repay their debts. Therefore, MNCs investment frees these countries’
regional government of resources needed to run State Owned Enterprises (SOEs), not just for quick financial gain but also for ensuring long-term stability in the region in order for sustainable capital accumulation to take place.

2.11 The Current Level of Investment by MNCs in the SADC

The SADC’s Protocol on Finance and Investment Article 3 of Annex 1 indicates that member states of the SADC should promote entrepreneurship in industries that specifically attract FDI (SADC, 2014). Hence, the SADC has directed member states to collaboratively develop a framework for tax incentives that draws FDI into the region. And place funds directly into production, where MNCs directly contribute to projects that create jobs in the region, as well as, develop the infrastructure and industry necessary to grow the economy.

It has been observed by South Africa Info (2013) that MNCs FDI flows to African countries increased by 5 per cent to US$50 billion in 2012, and that the SADC contributed about 25 per cent of Africa’s share of FDI, even as global FDI fell by 18 per cent. According to the UNCTAD’s World Investment Report (2013), while investment in extractive industries remained the most important driver of MNCs FDI to Africa in 2012, there was increased investment in consumer-oriented manufacturing and services, reflecting the growing purchasing power of the continent's emerging middle class.

Table 2.4: FDI Inflows in SADC 2000-2012 – Million US $

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Botswana</td>
<td>57</td>
<td>31</td>
<td>405</td>
<td>420</td>
<td>392</td>
<td>281</td>
<td>489</td>
<td>495</td>
<td>524</td>
<td>130</td>
<td>6</td>
<td>415</td>
<td>293</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>72</td>
<td>80</td>
<td>141</td>
<td>391</td>
<td>409</td>
<td>267</td>
<td>256</td>
<td>1.808</td>
<td>1.727</td>
<td>664</td>
<td>2.939</td>
<td>1.687</td>
<td>3.12</td>
</tr>
<tr>
<td>Lesotho</td>
<td>22</td>
<td>29</td>
<td>29</td>
<td>44</td>
<td>57</td>
<td>27</td>
<td>28</td>
<td>85</td>
<td>11</td>
<td>91</td>
<td>51</td>
<td>89</td>
<td>94</td>
</tr>
<tr>
<td>Madagascar</td>
<td>83</td>
<td>93</td>
<td>61</td>
<td>95</td>
<td>95</td>
<td>86</td>
<td>295</td>
<td>773</td>
<td>1.169</td>
<td>1.066</td>
<td>860</td>
<td>n.a.</td>
<td>n.a.</td>
</tr>
<tr>
<td>Malawi</td>
<td>26</td>
<td>19</td>
<td>6</td>
<td>66</td>
<td>108</td>
<td>140</td>
<td>36</td>
<td>124</td>
<td>195</td>
<td>49</td>
<td>97</td>
<td>129</td>
<td>129</td>
</tr>
<tr>
<td>Mauritius</td>
<td>277</td>
<td>25</td>
<td>32</td>
<td>62</td>
<td>11</td>
<td>42</td>
<td>105</td>
<td>339</td>
<td>383</td>
<td>248</td>
<td>429</td>
<td>273</td>
<td>361</td>
</tr>
<tr>
<td>Namibia</td>
<td>1.87</td>
<td>366</td>
<td>182</td>
<td>148</td>
<td>228</td>
<td>346</td>
<td>385</td>
<td>732</td>
<td>717</td>
<td>527</td>
<td>793</td>
<td>816</td>
<td>366</td>
</tr>
<tr>
<td>Seychelles</td>
<td>24</td>
<td>65</td>
<td>48</td>
<td>58</td>
<td>38</td>
<td>86</td>
<td>146</td>
<td>126</td>
<td>130</td>
<td>118</td>
<td>160</td>
<td>145</td>
<td>159</td>
</tr>
<tr>
<td>Swaziland</td>
<td>106</td>
<td>92</td>
<td>61</td>
<td>69</td>
<td>46</td>
<td>121</td>
<td>106</td>
<td>66</td>
<td>136</td>
<td>93</td>
<td>89</td>
<td>44</td>
<td>38</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>247</td>
<td>549</td>
<td>396</td>
<td>318</td>
<td>331</td>
<td>494</td>
<td>597</td>
<td>647</td>
<td>679</td>
<td>645</td>
<td>433</td>
<td>1.314</td>
<td>1.459</td>
</tr>
<tr>
<td>Zambia</td>
<td>122</td>
<td>72</td>
<td>298</td>
<td>347</td>
<td>364</td>
<td>357</td>
<td>616</td>
<td>1.324</td>
<td>939</td>
<td>695</td>
<td>1.729</td>
<td>1.106</td>
<td>1.066</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>23</td>
<td>4</td>
<td>26</td>
<td>4</td>
<td>9</td>
<td>103</td>
<td>40</td>
<td>69</td>
<td>52</td>
<td>105</td>
<td>166</td>
<td>387</td>
<td>400</td>
</tr>
</tbody>
</table>

Source: SADC Statistical Yearbook, 2014

Although the current level of MNCs inward FDI is increasing in the SADC (see Table 2.4), it has not been able to exceed the pre-2008 global economic crises figure of about US$ 18 billion. This decrease can be traced to the fundamental challenges facing the SADC region, such as, a lack of stable political, legal and macroeconomic environment, as well as, the need for a harmonised investment regime, quality economic infrastructure and qualified human resources that can support and manage an expanded but integrated regional market with high levels of liquidity (SADC, 2014). A critical appraisal indicates that on the aggregate level Angola, the
Democratic Republic of Congo, South Africa, Mozambique, Tanzania and Zambia have performed remarkably.

A recent study conducted by Saka and Lowe (2010) found that FDI promotes the growth of infrastructure through positive externalities. In recognition of the prevalent global trend, the SADC has continued the implementation of the Regional Indicative Strategic Development Plan (RISDP) along with the recently established Regional Infrastructure Development Master Plan (SADC, 2014). This has led to success in public-private partnerships FDI. As a result, member states have drawn private sector support for important roads, railways, ports and elsewhere, for petroleum and gas development, core extractive industries, telecommunications services, and for tourism infrastructure upgrades throughout the region (World Investment Report, 2013; SADC, 2014).

Table 2.5: FDI Outflows of SADC 2000-2012 – Million US $

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Angola</td>
<td>-21</td>
<td>-38</td>
<td>29</td>
<td>24</td>
<td>35</td>
<td>-219</td>
<td>-191</td>
<td>-912</td>
<td>-2570</td>
<td>7</td>
<td>1340</td>
<td>-2093</td>
<td>n.a</td>
</tr>
<tr>
<td>Botswana</td>
<td>2</td>
<td>381</td>
<td>43</td>
<td>207</td>
<td>-39</td>
<td>56</td>
<td>50</td>
<td>51</td>
<td>-92</td>
<td>6</td>
<td>1</td>
<td>-11</td>
<td>-10</td>
</tr>
<tr>
<td>Democratic Republic of Congo</td>
<td>-2</td>
<td>1</td>
<td>17</td>
<td>-23</td>
<td>8</td>
<td>-13</td>
<td>18</td>
<td>-14</td>
<td>54</td>
<td>-35</td>
<td>-7</td>
<td>91</td>
<td>420</td>
</tr>
<tr>
<td>Lesotho</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1</td>
<td>12</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>20</td>
<td>21</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Madagascar</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>-5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>n.a</td>
<td>n.a</td>
<td>n.a</td>
</tr>
<tr>
<td>Malawi</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>-1</td>
<td>2</td>
<td>3</td>
<td>6</td>
<td>14</td>
<td>19</td>
<td>-1</td>
<td>42</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Mauritius</td>
<td>-13</td>
<td>3</td>
<td>9</td>
<td>32</td>
<td>48</td>
<td>10</td>
<td>57</td>
<td>52</td>
<td>37</td>
<td>-129</td>
<td>88</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>-3</td>
<td>13</td>
<td>5</td>
<td>10</td>
<td>22</td>
<td>13</td>
<td>12</td>
<td>-3</td>
<td>5</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>Namibia</td>
<td>-11</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>8</td>
<td>18</td>
<td>-13</td>
<td>-5</td>
<td>6</td>
<td>8</td>
<td>9</td>
</tr>
<tr>
<td>Seychelles</td>
<td>-21</td>
<td>3180</td>
<td>399</td>
<td>-356</td>
<td>1352</td>
<td>-930</td>
<td>-6067</td>
<td>-2962</td>
<td>3137</td>
<td>-1156</td>
<td>75</td>
<td>257</td>
<td>4374</td>
</tr>
<tr>
<td>South Africa</td>
<td>-21</td>
<td>3180</td>
<td>399</td>
<td>-356</td>
<td>1352</td>
<td>-930</td>
<td>-6067</td>
<td>-2962</td>
<td>3137</td>
<td>-1156</td>
<td>75</td>
<td>257</td>
<td>4374</td>
</tr>
<tr>
<td>Swaziland</td>
<td>10</td>
<td>-18</td>
<td>-1</td>
<td>16</td>
<td>-4</td>
<td>22</td>
<td>1</td>
<td>14</td>
<td>114</td>
<td>-7</td>
<td>4</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>United Republic of Tanzania</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Zambia</td>
<td>-270</td>
<td>-1095</td>
<td>1</td>
<td>-1</td>
<td>-3</td>
<td>0</td>
<td>-1</td>
<td>0</td>
<td>-3</td>
<td>0</td>
<td>-43</td>
<td>-14</td>
<td>-46</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>-8</td>
<td>-4</td>
<td>-3</td>
<td>0</td>
<td>0</td>
<td>-1</td>
<td>0</td>
<td>-3</td>
<td>0</td>
<td>0</td>
<td>-43</td>
<td>-14</td>
<td>-46</td>
</tr>
<tr>
<td>TOTAL SADC</td>
<td>-315</td>
<td>3596</td>
<td>471</td>
<td>-340</td>
<td>-1388</td>
<td>-1142</td>
<td>-6244</td>
<td>-3923</td>
<td>446</td>
<td>-1510</td>
<td>2613</td>
<td>2116</td>
<td>5003</td>
</tr>
</tbody>
</table>

Source: SADC Statistical Yearbook, 2014

Most SADC countries are becoming host to foreign affiliates of MNCs from developing countries, not only from traditional Asian FDI investors such as China, India and Malaysia, as well as, Brazil, but also from within the continent. As of 2012, South African MNCs regained the position of the largest source country of FDI in Africa (South Africa Info, 2013). South African MNCs were active in acquiring operations in industries like mining, wholesale, healthcare, food processing, textile and clothing, financial, retailing and tourism sectors of the SADC region. It has been observed by the International Labour Organisation (2008) and Sauvant, Pradhan, Chatterjee and Harley (2010) that FDI activity is becoming increasingly diversified in both primary-intensive FDI and other services.

As mentioned in the introductory chapter of this study, South African MNCs contribute nearly 70 per cent of the SADC’s combined GDP (Export-Import Bank of India, 2012). And about 90 per cent of its FDI goes to this regional market (Page and Velde, 2004, Carmody, 2012). Apart from Angola, Zimbabwe, Namibia, Botswana and Mauritius, South Africa is the number one investor in other SADC countries.
From Table 2.5 above, it is clear that South African outward FDI is increasing with outward FDI of about US$ 4.3 billion (SADC, 2014). However, with steady rise in investments from Asia and the Organisation for Economic Cooperation and Development (OECD), South African MNC’s need to do more, so that they would not be overtaken by the competition from these countries (Sauvant, Maschek and McAllister, 2009).

Privatisation programs have strongly attracted FDI in the SADC especially after the abolition of Apartheid and the institution of democracy in South Africa in 1994 (SADC, 2014). This trend has attracted new investors within the group of OECD countries such as Canada, Italy, the Netherlands, Norway, Portugal and Spain (World Investment Report, 2013). More so, it has been observed by Lugt and Hamblin (2011) that fiscal incentives cannot be used to offset unattractive aspects of the legislative, regulatory or physical environment, this necessitates the creation of a viable competitive environment in the region. Also, other policy measures such as privatisation and foreign exchange reforms seem to have produced positive FDI results in the region (International Labour Office, 2007; United Nations Industrial Development Organisation, 2008; Schmidli, 2008; Trade Law Centre for Southern Africa, 2009; Walter and Sen, 2009; UNCTAD, 2009; Asian Development Bank, 2012). Finally, new studies conducted by Campos and Kinoshita (2008), Ngongang (2009), African, Caribbean, and Pacific Group of States - ACP (2011), Anyanwu (2012), Hartzenberg (2012), Mougani, Rivera, Zhang, Mezui and Kim (2013) suggests that there has been an observed relationship between regional integration arrangements (RIAs) and MNC’s FDI, although this depends on particular circumstances, scope and depth of such arrangements.

2.12 Multinationalising a Common Currency Accession in the SADC

The Committee of Central Bank Governors - CCBG (2013) studies on the SADC identified the need for greater knowledge of the structures and policies of central banks as well as the financial markets of member states as a prerequisite for future cooperation in the area of monetary policy. To this end, a project was launched to establish an information base on central banks in the region.

The new SADC Central Bank Model Law embodies the key principle that promotes the adoption of general principles that facilitates the operational independence of SADC central banks, create clear standards of accountability and transparency in the legal and operational frameworks of SADC central banks and facilitate the harmonisation of the legal and operational frameworks of central banks. These key principles are essential for the achievement of a harmonised legislation and the establishment of a regional SADC central bank (SADC, 2012). As a policy, all the central banks encourage international cooperation between the commercial banks in the region. The South African Reserve Bank (2013) observes that commercial banking enables currency exchange transactions to take place. Therefore, there is a need for indigenous banks such as like Standard Bank, ABSA and Nedcor to increase their regional investment levels just as their European contemporaries have done through banks such as Deutsche Bank, HSBC, BNP Paribas, Santander, ING and UBS.

Slager (2005) investigates the relationship between the internationalisation of banks, profitability and shareholder value. His study adopts the transnationality index to
measure the relationship between internationalisation and performance. He calculated the difference between foreign and domestic profitability and he finds that foreign profitability tends to be lower than domestic, and a negative relationship exists between total profitability and internationalisation.

Modern literature suggests that MNCs tend to support integration while banks support international cooperation (Heidenreich, 2012; Bonpasse, 2014; Bown, 2014). A research project by the European Competitiveness Report (2013) has suggested that a common currency favours manufacturing industries and trade. That is the reason why the most industrialised part of Europe, Germany, seeks to make sure that deviant countries are supported either financially or technically, while its companies thrive. New studies by Flatters and Netshitomboni (2006), Mpinganjira (2009), Chauffour and Maur (2011), Paulais (2012), Chilosi, Dugauquier, Lambe and Onizuka (2013) and Perry-Kessaris (2013) reveal that most banks know that when the SADC becomes integrated, non-payment of transaction costs fees significantly reduces their profits. As such the only way South African banks are encouraged to operate internationally is by reducing their taxable incomes in relation to their international exposures, and by deploying internet banking platforms as well as ATM machines across the SADC (Standard Bank, 2012), and by lobbying government to make favourable laws that encourages overseas transactions (The Presidency, 2013).

Although the SADC macroeconomic convergence programme is based on the assessment of four macroeconomic indicators set for 2008, 2012, 2015 and 2018, with more challenging goals set for the later periods, these goals can be achieved one after the other, starting with MNCs, banks and stock exchanges in the region working together (SADC, 2012). The findings of Burgess (2009), Rossouw and Padayachee (2011) and Jennings (2012) concludes that based on the 2012 macroeconomic targets inflation core of 5%, a budget deficit of two to four per cent is achievable and sustainable. Furthermore, given the target of achieving a government debt of less than 60 per cent of GDP, and a current account to GDP ratio of between three to nine per cent, the SADC has adequately set and implemented its plans for macroeconomic integration and accession come 2018 (South African Reserve Bank, 2013; World Investment Report, 2013; SADC, 2014).

Despite the poor debt and inflation ratings in countries like Angola, Congo, Zambia and Zimbabwe, the SADC convergent targets have performed better than the European OCA criteria. As a consequence of positive ratings given by international agencies on the SADC’s integration agenda, South Africa’s overall merchandise trade (i.e. exports plus imports) with the rest of SADC almost doubled (as it increased by 95%) between 2005 and 2009, from R42.6 billion to R83.1 billion and it is still rising (Industrial Development Corporation, 2010).

Studies carried out by Bonpasse (2014) have shown that with integration, apart from annual transaction costs being eliminated, regional assets values plus GDP appreciates. Also, regional currency imbalances may be completely eliminated and foreign exchange reserves reduced significantly (Allen and Hong, 2011; Maziad and Kang, 2012; Hess, 2013). More importantly, the SADC’s foreign reserves being held in a regionally denominated currency, would free more funds, that can be channelled to produce more goods and services, as well as build new infrastructures rather than maintaining an inefficient foreign exchange system that needs a large foreign
reserve to stabilise (Bonpasse, 2014). According to the European Commission, the gains from carrying out transactions in a single currency could be as high as 0.5 per cent of European Union GDP per year (Kouparitsas, 1999; O'Neill, 2011; Yeung, Kouparitsas, Luu and Sharma, 2013).

Parskevas, Dorokhova and Fotina (2008) examined the issue of growth in emerging markets and in particular how MNCs can achieve growth by understanding the customer and building a solid distributor network. Overall, the researchers stated that in emerging markets an MNC can grow if it can effectively gather and analyse customer and market data as well as appropriately build a distributor network that can deliver the product to the customer and fully capture the market potential. MTN, Shoprite, SABMiller, and Standard Bank have successfully established an efficient business link in Africa by taking full advantage of this market potential. Since MNCs usually invest in other countries due to low domestic supplies, Bekkali (2012), as well as, Hanauer and Morris (2014) observes that Africa offers huge investment opportunities for those companies willing to invest, as the utilisation of natural resources is at less than five per cent of capacity, creating room for plum exploitation. Therefore, as a matter of priority South African MNCs are advised to invest abroad, because these sectors of the economy develops faster, employ local labour and further integrate the SADC.

Another strong argument is that it is likely that the establishment of a common currency area in the SADC would lead to banks opening more branches throughout the region. The resultant effect is healthy competition among banks that subsequently increase local firms' access to bank financing at a significantly lower cost. Some scholars have argued that the creation of monetary unions facilitates trade and investment among the countries of the union through reduction of transaction costs as stated earlier, as well as help in the removal of the turbulence associated with a flexible exchange rate regime. Also, monetary unions could foster price transparency and could possibly improve policy discipline and credibility for countries within the group and also provide access to financial markets (Fiawoyife and Abor, 2007; SADC, 2012).

According to Belle (2010) the SADC is working on a programme to establish a common central bank in the region by 2016 and a common currency by 2018. Given recent global developments, it is unsurprising that commitment to, and progress on integration targets has weakened (Lunogelo and Mbilinyi, 2009; World Investment Report, 2012). Although macro-economic integration is a commensurately ambitious project, reflecting a political commitment to a regional approach to economic development, the SADC has made uneven progress towards these goals (Malhotra, McCaffrey, Poole, Solon, Velker and Wei, 2012). South African MNC investment definitely results in technology diffusion, improved linkage effects, increased level of FDI and employment across the SADC region. In addition, since the host countries' balance of payment improves due to higher export levels and tax payment by multinational corporations, trade convergence definitely leads to greater economic integration. Furthermore, contemporary studies by the EU (2012) conclude that integration helps to redistribute income in participating countries and thus reduces the level of inequality. It is therefore envisaged that strengthening regional integration through MNCs activities leads to positive growth spill-overs in the SADC (Chingono and Nakana, 2009).
2.13 Chapter Summary

This chapter focused on a general overview of the theoretical framework, practice, and concepts of the MNC. It laid emphasis on the evolution of MNCs, the role these corporations play in South Africa as well as in the global arena. The chapter critically evaluated the concept of the MNC, the theory of the MNC, as well as the growth of these firms. Also, this chapter analysed the importance of MNCs and the current level of investment by MNCs in the SADC while taking into cognisance the view of critics. Moreover, this chapter was able to show that there is a need for adequate infrastructure to be in place, if businesses are to thrive. However, since most SADC countries have budget deficits and long-standing debt problems, it becomes sensible for South African MNCs to leverage on regional integration initiatives which are devoid of protectionism and ultimately invest in the region.

Having related the concepts to the SADC, the following chapter (three) attempts to disaggregate the dynamics of SADC’s economic integration agenda. Furthermore, the next chapter identifies the reasons why macroeconomic integration is relevant to South African multinational companies in their quest for glocalisation (i.e. think globally, act locally).
CHAPTER THREE

THE DYNAMICS OF ECONOMIC INTEGRATION IN THE SADC

3.1 Introduction

A study by Burgess (2009) suggests that the SADC’s regional economic integration agenda includes a macroeconomic convergence programme, intended to achieve and maintain macroeconomic stability in the region. This, he argues, contributes to faster economic growth and lays the foundation for an eventual monetary union. The SADC thus set key target dates for 2008, 2012, and 2018 when specific goals should have been achieved (SADC, 2012). Recent studies of SADC countries show that most member states have recorded solid macroeconomic performance in recent years (World Investment Report, 2012). However, due to the ambitious nature of these targets, there is a need for further evaluation in order to streamline regional diversity in such a way that makes those policies achievable. Also, recent studies carried out by Visser and Hartzenberg (2004), Mthombeni (2006), Caholo (2012), as well as, Knight, Adoko, Auma, Kaba, Salomao, Siakor and Tankar (2012) suggest that South Africa and MNCs of South African origin remaine the dominant players in the region, thus can use their capacity and exposure to provide the building blocks for economic integration within the SADC (IMF, 2011).

This chapter deals exclusively with relevant discussion on the theoretical framework, practice and concepts of economic integration with special reference to the importance of economic integration in the SADC region. It also views, in brief, the historical overview of the SADC, further pointing out the role the SADC regional economic integration agenda plays in sustainable regional growth and development. Furthermore, the chapter also deliberates on the economic advantage that the SADC stands to gain over competing nations.

3.2 History of SADC

The SADC organisation was formed in Lusaka, Zambia, on 1 April 1980, following the adoption of the Lusaka Declaration, but at that time it was known as the Southern African Development Co-ordination Conference (SADCC). Later on, the Declaration and Treaty establishing the Southern African Development Community (SADC), which has replaced by the Co-ordination Conference, was signed at the summit of heads of state or government on 17 August 1992, in Windhoek, Namibia (Mensah, 2007; Ogbor, 2009).

A decision of the SADC summit held in Maputo, Mozambique, in August 1999 instructed that a review be conducted of the institutions of the SADC and its operations. This directive was based on the fact that under the sectoral-based approach that was inherited from the SADCC, the organisation was being constrained in its endeavours to achieve regional integration. Subsequently, the decentralised approach was discontinued in favour of a centralised one to be coordinated at the SADC secretariat headquarters (Mensah, 2007; Nzewi and Zakwe, 2009; Karns and Mingst, 2010; Mingst and Karns, 2011).

All SADC member states are now mandated to participate in a regional decision-making process through their national committees. The Integrated Ministerial Committee was consequently given the responsibility to oversee the implementation
of the five-year Regional Indicative Strategic Development Plan (RISDP) for the region and report to council on progress (SADC, 2012).

The SADC has over the past years been transformed into a viable inter-governmental organisation, with its headquarters situated in Gaborone, Botswana. The organisation’s goal is to further socio-economic cooperation and integration as well as political and security cooperation among fifteen southern African states. Its activities thus complement the role played by the African Union (DTI, 2011).

The SADC Free trade area commenced in the year 2000 with the participation of the SACU countries (South Africa, Botswana, Lesotho, Namibia, and Swaziland). However, Mauritius, Zimbabwe, and Madagascar were the next set of countries to join. In 2008 Malawi, Mozambique, Tanzania, and Zambia joined the trade area, bringing the total number of SADC FTA members to twelve. Despite the popularity of the free trade agreement Angola, DR Congo and Seychelles are not yet participating. Lastly, Madagascar’s membership has been suspended after the coup d’état led by the former mayor of Antananarivo Andry Rajoelina (Ploch and Cook, 2012). The main thrust of the SADC RISDP strategic document has clearly stated the economic goals over a fifteen-year period. This includes the creation of a free trade area by 2008 that has been achieved, a customs union by 2010 which is being implemented, a monetary union by 2016, and a single currency union by 2018 (Burgess, 2009).
3.3 Theoretical Framework of Economic Integration

Regional trade arrangements are an increasingly important element of the global trade environment. Indeed, it is estimated that between 50 and 60 per cent of global trade now benefits from regional preferences (Lunogelo and Mbilinyi, 2009). According to Zwizwai (2007) regional integration can be a key force for sustainable development. It can promote economic growth, reduce poverty, foster social development or protect the environment. He further emphasised that ensuring sound macroeconomic management is among the various measures governments can implement to promote such integration.

According to the World Trade Organisation (2011) there are approximately 300 regional trade agreements that were either in the planning process, had concluded negotiations, or were in force. This according to Baier, Bergstrand, Egger and McLaughlin (2008) has led to an enormous growth in the number of international economic integration agreements (EIAs). This trend has also led policymakers to consider a market for regionalism (Guraziu, 2008; Fawn, 2009).

What then is Economic integration? The findings of research studies carried out by Economic Commission for Africa (2012), Ceko (2013) and Abdin (2014) suggest that economic integration can be defined as the unification of economic policies between different states through the partial or full abolition of tariff and non-tariff restrictions on trade taking place among them prior to their integration. This is meant in turn to lead to lower prices for distributors and consumers with the goal of increasing the combined economic productivity of these states (Frimpong, 2013). Furthermore, a fundamental definition of this phenomenon has been provided by the Southern African Research and Documentation Centre - SARDC (2012:1) where they referred to economic integration as:

The unification of neighbouring states working within a framework to promote free movement of goods, services and factors of production, and to coordinate and harmonise their policies... as a process and a means by which a group of countries strive to increase their levels of welfare. It involves the recognition that partnership between countries can achieve this goal in a more efficient way than unilateral or independent pursuance of policy in each country.

Economic regionalism has dominated national economic literature discussions of late, indicating the major goals of economic policy in various countries. This reflects the idea that economic development can be achieved more efficiently through a regional approach rather than within national capacity alone (Willis, 2011). Many scholars have suggested that regional economic integration aids the development of import substitution industries as well as export-oriented industries. However, Baldwin and Seghezza (2010: 207) claims that regional economic integration has aroused a debate that brings to fore the question whether such groupings are “building blocks or stumbling blocks” towards efforts to create a global multilateral trading system and/or unified global economy, arguing that introducing trade liberalisation at the regional level can frequently be viewed as a preliminary step to wider global liberalisation (Moylan, 2013). He also asserts that regional blocks can create tariff walls and retaliatory protectionist blocs that can in turn, prevent truly liberalised trade from occurring. Dee and McNaughton (2011) and TRALAC (2012) buttresses this argument by stating that all regional agreements have the objective of reducing barriers to trade between member countries and therefore, implicitly, it discriminates...
against trade with non-member countries, which becomes a problem, as it violates World Trade Organisation competition laws (World Trade Report, 2012).

According to Frankel (2007) although most proclamations by political leaders of plans for full economic or monetary union had turned out empty, there are now some genuine successful examples of macroeconomic integration. This includes the following EIAs; East African Community (EAC), the Economic Community of West African States (ECOWAS), The Intergovernmental Authority on Development (IGAD), North American Free Trade Agreement (NAFTA), Community of Sahel-Saharan States (CENSAD), Asia-Pacific Economic Cooperation Free Trade Area (APEC FTA), Latin America Free Trade Area (LAFTA), Caribbean Community CARICOM – Single Market and Economy (CSME), Council of Arab Economic Unity (CAEU) Greater Arab Free Trade Area (GAFTA), Economic Cooperation Organisation (ECO), The Common Market for Eastern and Southern Africa (COMESA), Union of the Arab Maghreb (UMA), Economic Community of Central African States (ECCAS), Mercado Comun del Sur (Southern Common Market) Mercosur, Southern Africa Customs Union (SACU), European Monetary Union (EMU) and continental efforts towards an African Economic Community (AEC) (World Bank, 2012).

The SADC has thus implemented a development integration approach aiming at industrialisation. This is significant, because according to the Krugman-Venables (year) model of regional relocation, the least developed countries can benefit from trade and investment from the most developed ones (Capello and Nijkamp, 2009; Damijan and Kostevc, 2010; Dauth, 2010; Chauffour and Maur, 2011; Forslid, Häckner and Muren, 2011; Ietto-Gillies, 2012). This conclusion is based on the assumption that development would spread from South Africa to other less developed countries in the region (Ocheni and Nwankwo, 2012).

A study carried out by Mathews (2006) states that the idea of macroeconomic integration in international business (also sometimes known as the catch-up effect) is based on the hypothesis that poorer economies' per capita incomes tend to grow at faster rates than richer economies. This theory also applies to the SADC. As a result, all economies eventually converge in terms of per capita income. MNC’s product life cycle studies (Mehta, 2012) have suggested that developing countries have the potential to grow at a faster rate than developed countries because of diminishing returns (in particular, to capital) are not as strong as in capital rich countries. Furthermore, poorer countries can replicate production methods, technologies and institutions currently used in developed countries (Mathews, 2006; Fatás and Mihov, 2009; Gollier, 2013; Dincer and Hacioglu, 2014).

However, some scholars have criticised the theory, stating that endogenous factors, such as government policy, are much more influential in economic growth than exogenous factors. For example, carried out by the OECD (2011) observes that governments can substitute for missing prerequisites to trigger catch-up growth. However, the fact that a country is poor does not guarantee that catch-up growth would be achieved. Consequently, Abramovitz (1986) emphasised the need for social capabilities in order to benefit from catch-up growth (Runiewicz-Wardyn, 2013). These include an ability to absorb new technology, attract capital and participate in global markets.
These renewed commitments of SADC member states to macroeconomic integration have not only become a strategic drive but also a regional development blueprint. These plans have been outlined in the Finance and Investment Protocol (SADC, 2007). The document states that regional economic integration and macroeconomic stability are preconditions to sustainable economic growth, and for the creation of a monetary union in the region. The FIP publication went further to state that in order to achieve and maintain macroeconomic stability within the region (member states) shall converge on stability-oriented economic policies implemented through a sound institutional structure and framework. This has become the cardinal objective and core mandate of the SADC. It has been noted by the SADC (2012) that this agenda had been replicated from the Japanese experience, which aided the transformation of Japan into an industrial hub, and also helped to turn the Asian tiger countries into high-income economies.

### 3.3.1 Levels of economic integration

Economic integration can be viewed as the formation of a trading bloc that assumes the form of a preferential economic arrangement among a group of countries (HubPages, 2014). The form it may take ascends from least to most integrative, as shown below. They can be in the form of a free trade area, customs union, common market, and economic union.

![Levels of economic integration – the Geography of Transport Systems](Source: Rodrigue, 2014)

#### 3.3.1.1 Free Trade Area

A free trade area (or preferential trade area, i.e., FTA or PTA) is the least restrictive and loosest from of economic integration among countries (Kamau, 2010; Muneesamy, 2010; Snorrason, 2012; Makochekanwa and Chiwenga, 2013; Rodrigue, Comtois, and Slack, 2013). It occurs when tariff and non-tariff barriers are eliminated among members but varying tariff levels are retained against non-members of the union (Omilola, 2011). To date, only twelve out of the fifteen SADC
member states have signed the protocol for the FTA’s in the region (SADC, 2012). Since the implementation of the 2000 Amended Trade Protocol requiring country-specific schedules, which has yielded uneven progress thus far, the SADC has partially achieved its FTA agreement with a successful 85% elimination of tariffs on goods (Malhotra, McCaffrey, Poole, Solon, Velker and Wei, 2011: 1). The Dubai FTA experiment is a typical example of how free trade can lift the level of growth and development in a region. This study focuses on the FTA aspect of the SADC’s economic integration agenda.

3.3.1.2 Customs Union

The second form of integration is a customs union. Here, in addition to eliminating tariff barriers among member countries, the union has a common external tariff against non-members (Rodrique, 2014). This is essentially pre-specified to check the problem of re-exports, as well as help to ascertain the revenue sharing formula for tariff revenues that is to be shared among member nations of the union (HubPages, 2014). The SADC planned to implement a customs union in 2012 but that was not achieved. However, SACU, which is made up of some SADC member states such as Botswana, Lesotho, Namibia, South Africa and Swaziland, is a typical example of a functioning customs union.

3.3.1.3 Common Market

A common market is a deeper form of integration as opposed to shallower integration, which is restricted to international trade (World Trade Report, 2012). This form of integration allows free movement of factors of production like labour and capital in addition to allowing free exchange of goods and services among members of the union. Moreover, restrictions on immigration, emigration, and cross-border investment are abolished. This notion is based on the premise that when factors of production are freely mobile, then capital, labour, and technology can be employed productively (Kureková, 2011). However, despite the obvious benefits of a common market, member states must be prepared to align all their monetary, fiscal, and employment policies, so as to optimise the gains from such a union. Examples of a common market include the Caribbean Community Single Market and Economy CARICOM, the Southern Common Market Mercosur, and the Common Market for Eastern and Southern Africa COMESA (Madyo, 2008; Knox, Agnew and McCarthy, 2014).

3.3.1.4 Economic Union

The creation of a true economic union requires integration of economic policies in addition to the free movement of goods, services, and factors of production across borders (HubPages, 2014). It entails harmonising economic policies like taxes, monetary policy, government spending and introducing a common currency in addition to the free movement of factors, people, goods and services that exists in a common market (Durevall, 2011; National Treasury, 2011). An example of a partially successful economic union is the European Union.

3.3.1.5 Political Union

A political union represents the most advanced form of integration with members of the union surrendering their sovereignty to a supranational authority in order to form
a common government (Rodrigue, 2014). Since the global political system is built on the autonomy and supreme power of the nation-state, any attempt to undermine the authority of the state undoubtedly always encounters opposition (Piattoeva, 2010; Smits, Janssen, Briscoe and Beswick, 2013) as experienced in Greece, Italy and Spain. Consequently, no true political or economic unions are in effect today (HubPages, 2014). An example of a defunct political union is the old Soviet Union (USSR).

### 3.3.2 The Importance of Economic Integration

According to Oshikoya (2010) the ultimate goal of regional economic integration is to create a common economic space among the participating countries, which may evolve from trade links, as well as historical and cultural ties. This process entails the harmonisation of macroeconomic policies, legal frameworks and institutional architectures, towards nominal and real convergence. The potential benefits that member countries derive from these mutually beneficial arrangements include:

**A. Trade Growth Effect:** The standard argument is that economic integration can affect the rate of output growth, which is realised through a faster growth of factor inputs, particularly return on investment in human and physical capital, and through increases in the growth of total factor productivity (Oshikoya, 2010; Frimpong, 2014). Moreover, regional economic integration, which typically encompasses reduction in regional trade barriers and reduction in investment restrictions, can provide an important stimulus that may attract foreign direct investment (FDI). Bala (2012) admits that as a result of market enlargement, which is the engine for economic growth FDI can be attracted both from within and outside the regional integration arrangement (RIA). The most important function of the SADC FTA is that it allows for the most efficient use of resources, which is of great benefit to all member countries. This reoccurring factor has led to improved trade levels, which have increased the cumulative SADC GDP from R1.341 trillion in 2000 to about R4.190 trillion in 2010 (SADC, 2012).

It has been noted by researchers such as Nokaneng (2009) and Nshimbi and Fioramonti (2013) that prior to South African membership, the SADCC failed in its endeavours to promote meaningful progress towards regional economic integration, with intra-regional trade standing at about five per cent or less. South Africa’s membership in SADC have had a profound impact on the organisation in general and the level of intraregional trade in particular, raising the level of international trade from five per cent in the 1980s, to 17 per cent in 1995, 20 per cent in 2000 and 25 per cent in 2003 (Hartzenberg, 2012; Economic Commission for Africa, 2013).

**B. Pro-Competitive Effect:** This relates to increased scale economies and falling costs through the mechanism by which economic integration changes price cost mark-ups (Frimpong, 2013). Economic integration, which encourages trade liberalisation, might successfully erode market power of dominant firms in member countries through market entry of competing firms from other member countries (Bala, 2012). Hoekman (2011) suggests that the effect of trade liberalisation arising from economic integration would result in falling market power and expanded output in imperfectly
competitive sectors. This eventually leads to a reduction of the average production costs due to mass production, which subsequently increases the welfare of the society and also encourages private sector investment in the long run. Thus, member countries:
(a) Have wider selection of goods and services not previously available;
(b) Acquire goods and services at a lower cost due to lowered tariffs or removal of tariffs, and
(c) Encourage more trade between member countries. Additionally, it is anticipated that the balance of money spent on buying cheaper goods and services, can be used to further production and industrialise the SADC (Mambo, 2012).

C. **Political Cooperation and Greater Consensus:** The political case for integration has two main points:

(1) By linking countries together, making them more dependent on each other, and forming a structure where they regularly have to interact, the likelihood of political instability, violent conflict and war decreases (Hill, 2009).

(2) By linking countries together, they have greater influence and are politically much stronger in dealing with other nations (Peters, 2010).

Regional economic integration goes beyond the limitations of WTO, as it is much more likely that a few countries with close proximity and common interests are able to agree to even fewer restrictions on the flows between their countries (Elms and Low, 2013).

D. **Regional Public Good:** Developmental and environmental efficiency gains may arise from adopting a regionally integrated approach towards the provision of regional public goods (such as environment, water management, and migration, all of which have an impact on the economy) (Bala, 2012). Integration can help provide or protect regional public goods that cannot be effectively addressed individually but are best tackled in a cooperative framework. For example the SADC water management strategy (Beroch and Höcker, 2008; Frimpong, 2014). In this regard, economic integration can also be an effective approach towards conflict prevention by establishing ties with economic partners in a region. Regional economic integration may have the potential to complement ongoing efforts to support peace building, and regional good governance initiatives (Westerkamp, Feil and Thompson, 2009; Frimpong, 2013).

SADC Development projects like the Trans-Caprivi and Trans-Kgalagadi Highway provide kilometres of new or improved roads within the SADC that complement the goals of the Trans-African Highway (TAH) network (Maputo Corridor Development Programme JV, 2010; Ndebele, 2012). The Southern African Power Pool (SAPP) plan has been able to achieve the objective of optimising the use of available energy resources in the region and
supporting one another during emergencies (European Commission, 2009; SADC, 2012; IRENA, 2013). The plan is that new dams, transmission lines and joint product procurement of gas would make the SADC benefit from optimal economies of scale, which is necessary to fire gas plants. Moreover, the SADC plans to facilitate a programme for biomass energy conservation is a futuristic approach that is intended to tackle problems that may arise from climate change in the region (TMSA, 2011; IRENA, 2013).

The SADC region has also contributed significantly towards improved management of groundwater resources by sponsoring groundwater and drought management projects. According to Beetlestone (2005) the SADC groundwater management priority projects include the regional groundwater resource assessment of Limpopo/Save River Basin. In addition, the Orange-Senqu, Okavango, Rovuma, and Zambezi River Basins, Karoo Aquifers and Precambrian Basement Aquifers and the Okavango Delta, Kafue and Luangwa flood plains, Lake Malawi and Chilwa, the Oshana system, the sand river systems and the Dambo/Mbuga/Vlei valley systems are also receiving attention (SADC, 2012). Furthermore, the drought vulnerability and hydrogeological mapping for the region are priority projects the SADC has implemented successfully (Earle and Malzbender, 2006; Tadesse, 2008; SADC, 2010; Vicente-Serrano et al, 2012).

The destruction of water systems by nitrates from fertilizers and mining activities was observed in the Kafue Valley in Zambia, in the Kutama and Sinthumule districts of Venda, South Africa, and the Lomagundi Dolomite aquifer of Zimbabwe (Farr, Gumiremhete, Davies and Robins, 2005). This necessitated the institution of various commissions to manage, preserve and protect the ecological system of various water resources present within the SADC (Dinar, Dinar, McCaffrey and McKinney, 2013).

E. Creates Opportunities for Employment: As economic integration encourages trade liberalisation, market expansion, greater FDI inflows and outflows, and greater diffusion of technologies, it creates more employment opportunities for people to move from one country to another in order to either find jobs or to earn higher pay (Bacchetta, 2009; Bacchetta and Jansen, 2011). For example, industries requiring mostly unskilled labour tend to shift production to low wage countries within a regional cooperation arrangement. An instance can be made of Zimbabwe workers providing cheap labour for South African mines. Hence the SADC creates a kind of mobility of labour within the region, to compensate for areas of deficiency from areas of surplus skilled labour (Ndlovu-Gatsheni and Mhlanga, 2013).

A study by Mashayekhi, Peters and Vanzetti (2012) emphasises that an essentially positive effect of regional integration exists in the SADC. The study observed that there were considerable employment gains across member countries and sectors, particularly in the sugar, textiles, motor vehicles, electronics and manufacturing sectors. And, that further regional integration is expected to increase real wages and/or employment across the SADC (Karingi and Mevel, 2012).
F. **Beneficial Effects to Financial Markets:** Economic integration is extremely beneficial for financial markets as it eases firms’ ability to borrow finances at low rate of interest (Bank for International Settlements, 2014; Kersting and Görg, 2014). This occurs because capital liquidity of larger capital markets increases with size and the resultant diversification effect reduces the risks associated with high investment (Thakor, 2012).

Furthermore, the positive outlook of integrated regions helps to increase the amount of money flowing into their economy in the form of FDI. Once national firms make a FDI, through new operations or by merger, takeover, or acquisition, it engages in international business and as such becomes an MNC thereafter (Buckley and Casson, 2009; Odhiambo, 2013).

G. **Pro-Poor Growth:** Economic integration can contribute to pro-poor growth by integrating labour markets and lowering the barriers to investment for enterprises (Bala, 2012). Regional economic integration processes create single market economies that are characterised by common administrative and juridical procedures. It also creates a harmonised application of standards and norms, and also aligns rules for foreign investors. By creating a solid and effective framework for economic operators, the SADC is expected to help stimulate investment opportunities across the region (Oshikoya, 2010).

H. **Exchange Rate Risk:** Economic integration results in harmonisation of the exchange rates of member countries into a unified exchange rate mechanism (Frimpong, 2014). This, in the long run, leads to the elimination of exchange rate risk among member states, and hence encourages increased intra-regional trade and investment (McKinnon and Schnabl, 2014).

I. **Enhancing Regional Security and Bargaining Power:** Regional integration may serve as a platform for enhancing a country’s security in its relationship with other members. The idea that increasing trade reduces the risk of conflict has a distinguished pedigree (Bala, 2012). Collective bargaining power may help countries to develop common positions and to bargain as a group rather than on a country by country basis, which would contribute to increased visibility, credibility and better negotiation outcomes in the international fora among associations such as the IMF, WTO, World Bank, G8, UNDP, GATT and UNCTAD (Frimpong, 2013). Furthermore, regional integration helps to reduce inter-state tensions through mass enlightenment campaigns against xenophobia, as well as landowners vs. natives’ rivalries as they affect both national and regional economic security negatively (SADC, 2012).

With the fast pace of globalisation, interdependence among economies is accelerating across the globe (Basnet, 2011). Consequently, the economic and financial linkages between countries around the world are deepening more and more. Similarly, economic cooperation and policy coordination have been the guiding principles of policy makers, financial agents, and trade partners alike. Studies carried out by Lysenko and Desouza (2010), as well as, Meltzer (2013) point out that
information now flows from one corner of the world to another in the blink of an eye. As a result a small disturbance in Zimbabwe for instance can create ripples and tides at the same time all over the SADC. According to Basnet (2011) although the European integration has been a successful and an iconic example of economic integration in other regions of the world, such regional economic strategies pose serious challenges to their member countries in times of economic downturn.

3.4 Challenges Facing the Implementation of Economic Integration in the SADC

Economic integration and foreign direct investment have been widely adopted by developing countries, particularly in Africa, as viable strategies for economic development (Ogunade, 2011). For these countries, economic integration became not only a tariff issue, but also a strategy for development; hence the term developmental regionalism (Tomaney, 2014). McKinnon and Schnabl (2014) assert that as a strategy for development, the SADC integration effort was inadequate because of undue reliance on tariff reductions – so called negative integration measures. It was therefore suggested that in order to facilitate a more cohesive integration programme, countries in the region ought to adopt positive integration measures in the form of common policies on money and payments, industrialisation and most significantly, a common policy on investments (Bösl, Breytenbach, Hartzenberg, McCarthy, and Schade, 2008).

According to the SADC (2012), some of the notable factors that have militated against integration in the region are:

- Lack of transparency and predictability, especially in terms of non-tariff barriers (NTBs) and bureaucratic abstraction. According to the World Trade Report (2012) NTBs applied in the trade of goods and services erode efforts undertaken in making the SADC trade protocol that seeks to reduce barriers in reciprocal trade. As the trade liberalisation processes advance, lower tariffs tend to be partially replaced by NTBs. This reduces the transparency of trade rules (Vaillant, 2012). It is certain that the bulk of problems that constrain intra-regional trade in the SADC have to do with NTBs that stifle the movement of goods and services across borders.

Ntabazi (2010:10) however, points out that "One issue... that has been identified as crucial to bolstering intra-SADC trade is trade facilitation (TF). A process of reducing obstacles to trade at borders, including red tape, corruption, onerous customs procedures, restrictive visa systems, and complex data requirements for imports and exports, all of which increase the cost of trading across borders." These costs and inefficiencies provide a compelling case for implementing TF measures to make participation in regional trade easier, timely and cheaper (SADC, 2012). Also, regulatory oversight has affected the operations of MNCs within the SADC. For example the Zambian government put in place rules and regulations that ensure that local labour and produce are used in stores, which create a sort of intra-trade diversion. Pick 'n Pay decided to aim at selling even higher percentages of local products than required at higher prices (Lugt and Hamblin, 2011).
The SADC Trade Protocol agreements have therefore not been as effective as envisaged due to protectionist interests in member states that have pressed for exceptions to these rules on a sector and product-specific basis (SADC, 2012). Furthermore, trade rules have been modified to include detailed technical process requirements (Fliess et al, 2010), lower permitted import content, lack of physical infrastructure (Hartzenberg, 2011; McCarthy, 2014) and higher domestic value added requirements for textiles, garments, wheat flour, coffee, tea, spices, machinery and electrical products, mineral fuels and motor vehicles sectors of the SADC economy (Khandelwal, 2005; Mashayekhi, Peters and Vanzetti, 2012). Another demotivating factor affecting the SADC regional economic community (REC) and regional trade agreements (RTAs) is that of cumbersome bureaucratic procedures entailing that the SADC Summit of Heads of State and Government must ratify all decisions that affect the SADC, which makes the decision-making process very time-consuming (SADC, 2012).

High government reliance on trade-related revenues: The African Economic Outlook (2011) suggests that countries in the SADC such as Botswana, the Democratic Republic of Congo, Lesotho, and Swaziland rely on trade taxes as a means of raising revenue for their governments. These were mainly in the form of import duties. According to Pupongsak (2009) although trade liberalisation does not lead to deterioration in the trade balance, it worsens the fiscal balance in LDC’s that do not have an effective domestic tax reform structure when tariffs are either reduced or abolished.

Potential losses in government revenues resulting from preferential tariff reductions (PTR) have been a major source of concern to many participants in the SADC Trade Protocol negotiations (Hartzenberg, 2011). The most immediate and direct revenue impact of preferential tariff reductions under the Protocol is on existing trade (Cheelo, Malata and Tembo, 2012). There might also be some indirect revenue changes arising from shifts in trading patterns due to the Protocol, which may dissipate the likely gains from integration (Negasi, 2009). One striking feature in SADC’s LDC countries is that the lack of organisational capacity to institute good governance in their regions and reliance on foreign aid and trade-related revenues to stay afloat (Cheelo, Malata and Tembo, 2012).

The absence of well-managed mechanisms for redistributing benefits to disadvantaged partners: According to UNCTAD (2009:15) many of the RECs integration schemes lacked viable mechanisms for redistributing benefits from the net gainers to the more disadvantaged regional partners. Moreover, due to non-implementation of agreed trade liberalisation schedules as well as other obligations by members in non-sensitive sectors of the SADC economy (Institute for Global Dialogue, 2008; Stevens, 2008; World Trade Report, 2012), there is a bias towards contesting and ignoring regional integration initiatives (UNCTAD, 2009; Söderbaum, 2013; ECLAC, 2014). It does seem as if declarations of regional solidarity and commitment to economic integration were essentially costless and hence popular with political leaders (SARDC, 2012). There is an absence of politically acceptable compensation mechanisms to assure integration equity (Mthombeni, 2006). In order to bring
uniformity in the disbursement of benefits to disadvantaged partners in the SADC, the creation of a new organ called the SADC Account Allocation Committee is of great recommendation.

Lunogelo and Mbilinyi (2009) asserts that the duplication of memberships, often termed as the multiplicity of memberships to regional economic communities (REC) is among the problems stifling the acceleration of economic integration in Africa. Since it increases the cost burden of economic integration to the countries involved, it hampers the very purpose of the concept of economic integration i.e. efficiency in resource utilisation (TRALAC, 2012). In addition, this rising phenomenon complicates monitoring and derails the implementation of programmes. Since there are currently no guidelines and criteria available for countries when joining REC, this tendency has continued unabated (World Trade Report, 2012).

Despite the gains associated with regional integration, integration can be complicated (Oshikoya, 2010) by perceived losses among the members of their

1. National sovereignty
2. Revenue potentials through reductions in government tariff revenue, and
3. Discouragement of infant industries from external competition, which may lead some sectors to suffer through competition with more efficient producers in the partner markets of member nations (World Trade Report, 2011).

The creation of trading blocs by members of the SADC can also increase trade barriers against non-member countries, thereby stifling trade in the long run (Cronjé, 2014). Also, whether regional integration is in the economic interests of the participants depends on the extent of trade creation as opposed to trade diversion. Trade creation occurs when low cost producers within the free trade area replace high cost domestic producers. On the contrary, trade diversion occurs when higher cost suppliers within the free trade area replace lower cost external suppliers (Freund and Ornelas, 2010; Goel and Goel, 2014). Most times, economic integration causes trade diversion, which occurs due to the presence of trade barriers that may be imposed on non-member countries despite the inherent inefficiency in cost, associated with such countries. This normally leads to higher costs and inflation. A regional FTA like the SADC therefore makes the world better off if the amount of trade it creates exceeds the amount it diverts (Ngenyeh, 2009; World Trade Report, 2011). Although there are always painful adjustments, nations that are likely to be directly hurt by integration lobby hard to prevent such losses.

Furthermore, inadequate political commitment is one of the most serious constraints to integration. There has been inadequate political will to effectively implement agreed programmes for economic integration (Oshikoya, 2010). This in part explains the seemingly contradictory or overlapping schemes for economic integration, the inadequate funding for economic integration organisations in terms of low priority being given to them, and the slow or little progress made in achieving stated objectives at the continental, regional and sub-regional levels (Mangeni, 2004; Omoro, 2008). Because post-independence regional cooperation has its roots in political interests, rather than economic rationale, measures agreed in regional forums are rarely incorporated in national policies and plans (Grabbe, 2012). Most
times, implementation at the country level is relatively slow. This is clearly indicated by the number of regional protocols, which are not ratified for years in several member states due to fear of short-term political and economic problems, shortage of resources, inadequate expertise, and a considerable lack of interest (SADC, 2012).

Slow ratification of protocols and reluctant implementation of agreed plans is another challenge facing economic integration (Maruping, 2005; Madyo, 2008). Due to low political commitment and/or perceived or real losses and sacrifices involved, a number of countries have been reluctant to fully implement integration programmes on a timely basis. This has been partly caused by the lack of prior cost-benefit analysis and broad internal consultations on the part of the member countries concerned (Biswaro, 2012). In some cases, changes in the socio-economic and political dynamics within the member states involved have also militated against implementation of regionally agreed programmes, especially where socio-economic sacrifices are concerned. Botswana and Mauritius have consistently built over the years a stable democracy, infrastructure and financial outlay, which they fear, may suffer from contagion of destabilisation from the SADC economic integration (Teunissen and Akkerman, 2005; McCandless and Karbo, 2011; Obuah, 2012).

Another notable risk is that regional integration issues and programmes are often discussed without the active participation of the constituencies most affected – the private sector and civil society (Giffen and Judge, 2010; CIVICUS, 2011). Lack of full private sector involvement at both the planning and implementation stages has not elicited input from this important sector that owns both the productive capacity as well as the financial resources. In most countries the private sector remains weak and is still not well organised to help further the integration process (Biswaro, 2012). In particular, local companies cannot cope with the rigours of expansion into regional markets without the backing of home-country government. Similarly, the possibility of labour movements across national borders is something labour unions should help to shape, but these unions lack the cooperation and infrastructure necessary to manage unions in other countries (Oshikoya, 2010; Baylis, Smith and Owens, 2011).

Furthermore, inadequate budgetary support, administrative and managerial weaknesses have adversely affected the effectiveness of RECs. There is a need for a strong, adequately trained, and independent management that is fully committed to implementing the ideas of RECs (Simeon, 2013). What is more? With few exceptions, RECs have not made sufficient progress in establishing self-financing mechanisms. Laporte and Mackie (2010) notes that RECs’ problems arise from their reliance on assessed contributions from member states, which are paid erratically, largely due to weak national budgetary positions. The lack of mechanisms and resources for effective planning, coordination, implementation, monitoring and pragmatic adjustment of programmes on the ground has significantly impacted on fast-tracking regional integration in Africa (Maruping, 2005; United Nations Economic Commission for Africa, 2011; Centre for Conflict Resolution, 2012; NEPAD, 2012; ECDPM, 2014).

Biswaro (2012) indicates that many African countries belong to several regional groupings or sub-groupings that sometimes compete, conflict or overlap amongst themselves rather than complement each other. This ensuing proliferation of overlapping regional schemes results in conflicting spheres of jurisdiction as larger
regional groupings consume smaller ones. The process of regional integration is impeded when different organisations in the same region have the same mandate, or where a country belongs to two or more organisations that are pursuing different policies at a particular time (Rathumbu, 2008; Zyck, 2013). This adds to the burden of harmonisation and coordination, and becomes a wasteful duplication when resources become constrained by a loss of efficiency advantages. For example some SADC member countries share common membership status in rival associations such as the AU, NEPAD, COMESA, CMA, SACU, ECCAS, IGAD, EAC, IOC, and CEMAC (Mashayekhi, Peters and Vanzetti, 2012).

According to the findings of a study by Baier, Bergstrand, Egger and McLaughlin (2008: 461-465) the computable general equilibrium (CGE) models have long dominated policymakers’ analysis of the potential economic benefits from changing trade policies. These include the formation of EIAs that are recognised by most researchers as the “spaghetti bowl” of FTAs. Surprisingly, estimates to date using the workhorse for ex-post empirical analysis of the effect of EIAs on trade flows (which is known as the gravity equation) often find economically and statistically insignificant effects of EIAs on trade. This can be deduced from the fact that these regional bodies, suffering from conflicting mandates, overlapping memberships and inadequate support, could well obstruct rather than facilitate promising linkages that would otherwise emerge from trade liberalisation (Rodrique, 2014).

The Malhotra, McCaffrey, Poole, Solon, Velker and Wei (2011) report suggests that a realistic and economically sensible way forward for regional integration in the SADC is through a variable geometry model; where a group of countries with advanced progress on economic and structural alignment – such as the CMA – consisting of Lesotho, Namibia, Swaziland and South Africa forms a nucleus, and other countries joins this nucleus at different speeds, as economic and political conditions warrant. Their study concludes by stating that their analysis of economic variables suggests that such countries might include Angola, Botswana, Mauritius, and Zambia, though caveats apply because of each country's distinctiveness (World Bank, 2013; Hudson and Leftwich, 2014).

Other challenges to regional integration schemes are posed by free-riders and hegemons. Far too often a nation attempts to benefit from membership in regional organisations, taking advantage of regional development funds and trading relationships, without adhering to the monetary policies or spending targets agreed to by the community (Blaauw, 2014). These free riders can threaten the cohesiveness of the community and the reputation of the regional organisation. Equally, the economic benefits of regional integration most often pool (or consolidate) the dominance of the regional hegemon. This occurs for multiple reasons, but is partly due to the ability of a region’s largest economy to attract more inbound foreign investment as well as to exert its political demands on smaller/weaker neighbouring states (Petersmann, 2012).

Furthermore, there are potential roadblocks, as SACU members which constitute a large portion of SADC membership have been bitterly divided over whether to accept the terms of a European Partnership Agreement (EPA) with the European Union (Grynberg and Motswapong, 2012; Thomy, Tularam and Siriwardana, 2013). SACU was strongly divided when Lesotho, Swaziland, and Botswana signed off on the terms of the EPA, because both South Africa and Namibia resisted the impact of
such a move on their regional integration agenda (Mongardini, Benicio, Fontaine, Pastor and Verdier, 2011). Draper et al (2011) of the South African Institute of International Affairs have argued that Botswana, Lesotho, and Swaziland feared losing market access to export their goods to Europe, and they wanted to retain trade links with one of the wealthiest regions in the world (Langeni, 2010).

One of the key questions about South Africa’s role in furthering economic integration is its willingness to expend scarce capital to aid the development of neighbouring states. The current reality is that, when it comes to fellow SACU members, South Africa is willing to use funding to buy regional harmony and economic peace, up to a point (Blumenfeld, 2010). For its fellow SACU states, the economic gains appear to outweigh the loss of autonomy in trade policy (Rathumbu, 2008). It has been observed by the SADC (2012) that current SACU revenues are divided in such a way that Lesotho, Swaziland and Namibia receive a disproportionate amount of revenue compared to South Africa. This allows for development funds to flow into the lesser-developed countries in SACU, while allowing South Africa to benefit from trade and investment with the other members. Botswana, with a roughly comparable per capita income to South Africa, receives roughly what it pays into SACU while benefiting from the market access afforded by membership of the union. This makes the creation of an SADC Development Fund vital for the SADC FTA to function effectively (Mashayekhi, Peters and Vanzetti, 2012).

The benefits from economic integration can be substantial, but they are not automatic. In the same manner, regional integration can either be a building block or a stumbling block to the economic prosperity of member nations (Madyo, 2008; World Trade Report, 2011). World Trade Report (2007) observes that integration among LDCs requires considerably more than the dismantling of direct trade restraints between member-states, if the endeavour is to have a reasonable chance of success. It has also been observed that the benefits of integration can vary greatly from grouping to grouping, and for some, integration may be a costly mistake. It is fundamentally necessary therefore that a weighted consideration of many factors should be undertaken before the integration decision is made (International Development Research Centre, 2013).

The results of studies carried out by Negasi (2009) show that the intra-SADC trade is growing in fuel and minerals, and heavy manufacturing sectors while it displays a declining trend in agricultural and light manufacturing sectors. This indicates that SADC has displaced trade with the rest of the world in both fuel and minerals, and heavy manufacturing sectors. However, the increasing trend of extra-SADC trade bias over the sample period of 2000 to 2007 in both agricultural commodities and light manufacturing sectors means that there has been a negative trade diversion effect (Munyuki, 2011).

The presence of more advanced developing countries such as South Africa, and poor ones (Angola, the Democratic Republic of Congo (DRC), Lesotho, Malawi, Mozambique, Tanzania and Zambia), within regional groupings, means that there is an absence of politically acceptable compensation mechanisms to assure integration equity (SARDC, 2012). A simple analysis of the cross-border economic activity among LDCs leads to the misleading conclusion that SADC countries are not natural trading partners, as such can be considered as the main reason for the general
failure of regional integration. But relatively, it is the continuous wars or the effects of recently ended conflicts (in four of the seven LDCs of the SADC, Angola, Mozambique, Lesotho and the Democratic Republic of Congo) among other things that have really been hampering regional integration (Rathumbu, 2008; World Trade Report, 2013).

Another challenge facing the SADC regional integration agenda is debt. Rising external debt and problems of debt servicing are causing an enormous debt burden and debt overhang among LDCs. The findings of studies conducted by Chipeta (2006), Bösl, Breytenbach, Hartzenberg, McCarthy and Schade (2008), as well as, SARDC (2012) are that there is a diversion of attention and priorities to short-term stabilisation measures at the expense of long-term economic growth and development, which promote regional integration. It has also been argued that the SADC lacks the income levels and structural complementarities that would generate large gains from regional specialisation. This problem is also compounded by the fact that changes in the structure of effective protection to facilitate free movement of goods were driven primarily by balance of payments (Ocampo, Rada and Taylor, 2009; SADC, 2012).

Although the SADC has made significant progress in reducing tariffs and eliminating quotas, the potential benefits of tariff liberalisation are however constrained by restrictive, product-specific rules of origin (RON), especially on clothing and textiles and agro-processed products (Kalenga, 2012). It was observed by TMSA (2011) that more flexible rules of origin that require lower thresholds of regional value addition, would enable many smaller SADC countries to expand their production capacity and enhance their trade performance.

On the contrary, the potential gains from liberalisation are further eroded by the proliferation of non-tariff barriers (NTBs), many of which violate specific provisions in the SADC Trade Protocol (Hartzenberg, 2012). Imposing new NTBs, quantitative import and export restrictions and export duties on intra-SADC trade is prohibited by the Protocol and only apply in exceptional circumstances. It has been observed that one of the biggest structural impediments to the SADC FTA’s smooth functioning is less developed members’ reliance on NTBs to trade (Ngenyeh, 2009; World Trade Organisation, 2011). NTBs in SADC can include, but are not limited to, things like truck taxes, road taxes, tolls, port charges and other behind-the-border regulatory impediments that can increase the cost of doing business and hamper intraregional trade in Southern Africa (Hartzenberg, 2012).

The general conclusion of this literature study is that there is ample theoretical and practical justification for the formation of economic integration among the SADC countries (Negasi, 2009; Mashayekhi, Peters and Vanzetti, 2012; Frimpong, 2014). While economic integration is beneficial, the costs are not shared equally amongst integrated countries (Bernanke, 2006).

3.5 Balancing the Framework for Foreign Direct Investment (FDI)

It is well-known in international business literatures that FDI is the lifeblood of MNC’s (Ferreira, 2011; Ogunade, 2011; Teixeira and Grande, 2012) and that once a firm engages in FDI it transforms into a multinational company (Fons-Rosen, Kalemli-Ozcan, Sorensen, Villegas-Sanchez and Volosovych, 2012; Japarov, 2012; Gupta and Qiu, 2013). This has necessitated a brief discussion on the expansion strategies
of MNCs using the FDI framework as a point of departure. Several companies invest abroad due to reasons such as increasing market outreach, improving efficiency of resource utilisation and assets, seeking initiatives of multinational companies. According to Milner (2014) MNCs as productive instruments of a liberal economic order help to convey capital to where it is scarce, transfer technology and management expertise from one country to another, and promote the efficient allocation of resources in the global economy.

According to Aregbeshola (2008) most researchers support the notion that FDI contributes to the productivity and growth of local enterprises through the spillover effects and externalities resulting from FDI. Consequently, the United Nations Conference on Trade and Development (UNCTAD, 2012: 3) defines FDI as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident entity (the foreign direct investor or parent enterprise) of one country in an enterprise (foreign affiliate) resident in a country other than that of the foreign direct investor.

With increased globalisation of trade and investment, a growing number of studies have identified two types of FDI's that exist (Tvaronavičienė, Kalašinskaitė and Šimelytė, 2009). According to these authors, these forms of FDI are horizontal and vertical FDI. Horizontal FDI takes place when an enterprise manufactures the same product in different countries by investing directly abroad (this form of FDI is usually carried out by horizontally integrated MNCs, as discussed in Chapter Two); while the vertical FDI occurs when an enterprise performs different stages of the production process in different countries thereby generating intra-organisational trade. It has been observed that this form of FDI is usually carried out by vertically integrated MNCs as was examined in Chapter Two (Aregbeshola, 2008; Méon and Sekkat, 2013).

Aregbeshola, Luiz, Ojah, Oosthuizen, Palmer and Venter (2011) mention the following factors as the principal reason why horizontal FDI is the preferred mode of international expansion:

1. Transport costs may constitute a major cost driver if the product is characterised by high weight-to-value ratios like cement, paints, and steel
2. Market imperfections can arise as a result of government intervention
3. Imitating competitors
4. Strategic behaviour, and
5. Location advantages as a result of labour and resource cost. Walmart, Nestle, Cadbury, Cemex, SABMiller, and Anglo American are notable MNEs that carry out horizontal FDI chiefly as an international strategy to expand the organisations’ operational capacity.

Vertical FDI can be categorised into two forms, namely backward vertical FDI and forward vertical FDI. Backward vertical FDI occurs when an enterprise ventures abroad to take control of the source of its raw materials, this is mainly common in the extractive industry. De Beers, Alcoa, Cemex, Anglo American, Mittal Steel, BHP Billiton, Chevron, BP, Engen and British American Tobacco Company are examples of companies that use this strategy. On the other hand, forward vertical FDI occurs when a domestic enterprise invests abroad to market its product by investing in its own distribution network (Okeyika, 2012). Volkswagen USA once utilised this
strategy and Pepsi Cola has adopted this strategy in South Africa to fight the dominance of Coca Cola that has a first-mover advantage in the beverage industry.

Over the years, FDI has been viewed as a major stimulus to economic growth in developing countries (UNCTAD, 2012). Its perceived ability to deal with major obstacles such as shortages of financial resources, technology, and skills has made it the centre of attention for policymakers in developing countries such as Africa (Frimpong, 2013).

Many reasons have been stated with regards to why FDI penetration into African countries has been hindered. Some of these reasons include poor perceptions, shortage of skills, labour regulations, poor infrastructure and corruption (Razzaque and Raihan, 2008; European Report on Development, 2013). The World Economic Forum (2013) Global Competitiveness Index indicates that extortion, rent seeking, bribery, and the lack of access to Africa’s underdeveloped markets coupled with a lack of consistent government policy leads to low profits. These negating factors that are mostly inconsistent with business setup projections discourage investors from investing in Africa. Many companies have also attributed the delay in getting approval to start a business as a notable reason for the drop in FDI inflow to Africa. The following reasons have been cited as the major cause of delays in getting approval to start a business in Africa:

- **Customer Service unhelpful Attitude:** Since the end of apartheid, foreign trade in South Africa has increased following the lifting of several sanctions and boycotts which were imposed as a means of ending apartheid (Freemantle and Stevens, 2012; Mpofu, 2012). This trend is however different in the rest of Africa and the SADC in particular. Foreign investors who try to invest in Africa are laid back by embassy delays in issuing visas as well as in disseminating genuine information about their countries to aspiring investors. Also, most African companies do not have a reliable customer service centre that can give adequate response for business enquiries (SABPP, 2012). Additionally, sometimes they unwittingly are not committed to their jobs due to poor remuneration and work ethics. Most times, some of the employees of these companies work part-time as sex workers (South African Law Reform Commission, 2009). Although all SADC governments have relaxed regulations for foreign investors, the employees of government departments do not have the capacity to communicate such incentives due to excessive corruption at the top tier of the civil service (Carr, 2009).

- **Delays Beyond the Necessary for approval or Signatures:** The most frustrating aspect of doing business in Africa is when it comes to filling and documenting company information. So many agencies of government with different official capacities need to append signature before you proceed (The Economist, 2010). The registration of a company takes about two weeks to three months on average, before filing for tax is approved (World Economic Forum, 2013). In order to curb the excesses of corrupt government officials who demand gratification before appending their signatures, there is a need to computerise and digitalise the approval levels necessary to carry on business activities within the SADC (FSB, 2008; SACU, 2011).
Complexities Caused by the Need to Administer Poorly Designed Incentive Schemes: In an increasingly globalised world, administering an incentive scheme for RECs like the SADC is an arduous task (UNCTAD, 2012). Most of the SADC member states are also members of other regional organisations and the World Trade Organisation (World Investment Report, 2013). Having signed the Most Favoured Nation clause of the UNCTAD, it is fundamentally counter-productive to set up a parallel Preferential Trading Arrangement (PTA) (Rathumbu, 2008). However, the SADC has been able to set up Export Processing Zones, trade and technology hubs that benefit from juicy tax incentives, preferential tax rates for certain investments, capital recovery allowances, and reduced import duties on capital and raw materials (UNIDO, 2012). Nevertheless, since there are serious deficiencies in the investment packages offered to investors, most MNCs’ investments are rendered fundamentally unviable right from the start due to undisclosed NTBs and non-participation of the private sector in the decision-making process.

Lack of Computerisation or a Lack of Capacity in Registration or Regulatory Applications: Most member nations’ custom authorities do not have or properly utilise computerised customs clearance at their national borders, ports and airports (Pearson, 2011; SADC, 2012). According to the Pearson and Chaitezvi (2011) it is necessary for all the SADC member states to implement a computerised customs management system such as ASYCUDA ++ that has transit modules in-built (the MODTRS module) that handles three transit documents, namely the T1, the TIR Carnet and the First Identification Procedure (FIP).

Moreover, due to a lack of original registration documents, translation services and untrained personnel, tax assessment such as VAT exemption of some goods and services cannot be appropriately quantified (SARS, 2012). Having successfully deciphered the problems facing foreign investors in the SADC, it is obvious that the most economical solution is to computerise the whole registration and regulatory application procedure for MNCs investing in the region. There is also a need for launching and implementing E-Records management and governance applications all over the SADC (SADC, 2012).

Duplication of Effort among Agencies which Require the same Information: In many African countries all agencies fight for supremacy and relevance over the other. For example, the regulation of telecommunications masks and frequencies may be carried out by as many as four departments or agencies of government, or even by the local police (ITU, 2010). The revenue authorities, department of trade and industry, may be at loggerheads with local, state and federal governments with respect to who should collect taxes (SARS, 2012; Deloitte, 2012). As such there several recorded cases of double taxation that exists in the SADC (Deloitte, 2012).

At both the sea ports and airports, clients may go through checks from as many as seven different security agencies ranging from food and drug administration and control, standard organisation, state security services, immigration, customs, police, port health, quarantine, drug law enforcement agency, army, navy, airfare, Interpol and many others (World Investment Organisation, 2012).
Report, 2013). They all arrogate to themselves the power to examine, detain or release goods! The end result is trade disharmony and frequent bribe-taking by local authorities (UNCTAD, 2011). There is a need to train and mandate only one agency to conduct searches and where necessary appropriate security agencies are notified in order to improve the ease of doing business within the region.

- High Costs caused by the Requirements for Company Formation and upfront Capital Taxes: As a mandatory requirement, most foreign firms must register their companies in almost all African countries (Mouloul, 2009). This complex and time consuming process is laden with corruption and can dissuade potential investors from continuing with their investment plans. Legal requirements also make the process very expensive, as attorneys can charge between 5% and 25% of the total cost of the investment that is being processed (World Investment Report, 2013). Then, despite tax incentives and holidays being granted to new companies, tax authorities still force these firms to pay capital taxes upfront, then file for exemptions that in most cases are never granted due to poor record keeping culture in these agencies (Commission on Taxation, 2009; BDO, 2012). In the COMESA-EAC-SADC Tripartite region the cost of road transport increases due to delays at the border where on average there is a three-day delay and a stationary truck is charged between US$200 and US$400 per day (Pearson, 2011). When you add this cost to the cost of transporting a 20ft container from Durban to Lusaka (which is between US$5,000 to US$8,000), it becomes more expensive to ship the same container from Japan to Durban (because it costs just US$1,500 to ship from there) (TMSA, 2011).

Apart from the various constraints that companies encounter while trying to invest in Africa, there are potential problems associated with FDI investment in Africa that include but are not limited to:

I. Impact on Domestic Competition. FDI, and in particular M&As often have a negative impact on the level of competition in the domestic market. This often leads to restrictive business practices and abuse of dominance. TNCs sometimes damage host economies by suppressing domestic entrepreneurship and using their superior knowledge, worldwide contacts, advertising skills, and a range of essential support services to drive out local competitors and hinder the emergence of small-scale local enterprises (Katate, 2011).

II. Impact on the balance of payments. Trade deficit can be a real constraint for developing countries. If investors import more than they export, FDI can end up worsening the trade situation of the country (World Trade Report, 2011).

III. Instability. Volatility is associated with portfolio capital flows. Although investment in physical assets is fixed, profits from investments are as mobile as portfolio flows and can be reinvested outside the country at short notice. Since profits may surpass the initial investment value, any perceived economic shock may trigger outward FDI that may further worsen the economic conditions of underdeveloped African countries, because of capital flight (United Nations Department of Economic and Social Affairs, 2012).
IV. Transfer Pricing. This refers to the pricing of intra-firm transactions, which does not reflect the true value of products entering and leaving the country. This could lead to a drain of national resources (United Nations, 2011: 2014). What is more? Countries may lose out on tax revenue from most corporations, as they are able to juggle their accounts in such a manner as to avoid their tax liabilities.

V. The impact of development, when FDI occurs through TNCs, is uneven. In many situations TNC activities reinforce dualistic economic structures and increase income inequalities (Mthombeni, 2006). They tend to promote the interests of a small number of local factory managers and relatively well paid modern-sector workers against the interests of the rest of the population by widening wage differentials. They tend to worsen the imbalance between rural and urban economic opportunities by locating primarily in urban export enclaves and contributing to the flow of rural-urban migration.

VI. TNCs use their economic power to influence government policies in directions that usually do not favour development. They are able to extract sizable economic and political concessions from competing governments in the form of excessive protection, tax rebates, investment allowances and the cheap provisions of factory sites and services. As a result, the profits of TNCs may exceed social benefits (Mwilima, 2003; Satyanarayan, 2009).

VII. Balance of Payments Effects. Critics argue that while the initial impact of an inflow of FDI on the host country’s balance of payments may be positive, the medium-term impact is often negative, as these MNCs increase their imports of intermediate goods and services, and begins to repatriate profits (Williams, 2010).

FDI data is considered essential when determining the direction of foreign direct investment stocks and flows (Buthe and Milner, 2008; Hunya and Stöllinger, 2009). These data comprise capital flows (that consist of equity, reinvested earnings and other capital), stocks at the end of the year (that comprise equity and reinvested earnings, plus other capital), and income flows (that consist of dividends, reinvested earnings, and interest). However, the structure of FDI flows can be hard to trace.

MNCs impact on the economies of the host country significantly in many ways. However, more specifically, as noted by Van den Berg (2012) it is the quality of the labour force, its accumulated experience and human capital, its education system, and so on, that determines an economy’s ability to create new ideas and adapt old ones. Consequently, improvements in education and human capital are essential for absorbing and adapting foreign technology, and to generate sustainable long-term growth (Kamara, 2006; Nkechi and Okezie, 2013).

Along with international trade, the most important vehicle for international technology transfer is FDI. It is well known that MNCs undertake a major part of the world’s private R&D efforts and produce, own, and control most of the world’s advanced technology (Blomstrom and Kokko, 2003; Erika and Watu, 2010). When an MNC sets up a foreign affiliate, the affiliate receives some amount of the proprietary technology that constitutes the parent’s firm specific advantage and allows it to compete successfully with local firms that have superior knowledge of local markets, consumer preferences, and business practices. This leads to a geographical diffusion of technology in areas of MNC operation (Marin, 2008). That means technology can flow easily from South Africa to SADC member countries if the
economic integration in the SADC bloc thrives. Hence, South Africa, being the largest economy, has the facilitative role to play in this regard.

The 2010 version of the OECD FDI Regulatory Restrictiveness Index (Kalinova et al., 2010) covers 48 countries and is calculated across 22 economic sectors. South Africa ranks 21st out of the 48 countries from most to least restrictive and has an Index score of 0.089 (1=closed; 0=open). South Africa appears to perform reasonably well against this measure – especially compared to the 2006 version of the Index where differences in methodology implied that South Africa ranked as the seventh most restrictive out of 43 economies (OECD, 2007; National Treasury, 2011).

UNCTAD estimates that the stock of FDI in South Africa amounted to 44 per cent of GDP at the end of 2009. The most remarkable achievement of this economy is that the sectoral composition of FDI is reasonably diverse, reflecting investments across manufacturing, mining, and financial and business services (National Treasury, 2012).

Table 3.1 below shows the varying level of sectoral composition of the stock of FDI liabilities. It reveals that mining and quarrying FDI related investment represent about 33.4 per cent of the total stock of FDI investment into the country, while manufacturing and finance insurance real estate business services both contribute over 55 per cent of the total stock of FDI investments. Recent studies carried out by the South African Reserve Bank (2013) indicates that with South Africa's commitment to maintaining an open environment for investment, the country remains the most attractive destination of foreign direct investment in Africa. As such, South Africa is well positioned to anchor a possible macroeconomic integration within the SADC.

Table 3.1: Sectoral composition of the stock of FDI liabilities

<table>
<thead>
<tr>
<th>Sector</th>
<th>% of total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining and quarrying</td>
<td>33.4%</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>27.9%</td>
</tr>
<tr>
<td>Finance insurance real estate business services</td>
<td>27.1%</td>
</tr>
<tr>
<td>Transport storage communication</td>
<td>7.5%</td>
</tr>
<tr>
<td>Wholesale and retail trade</td>
<td>3.6%</td>
</tr>
<tr>
<td>Other</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Source: South African Reserve Bank - Quarterly Bulletin, 2010

According to UNCTAD World Investment Report (2010:xix) following almost a decade of uninterrupted growth, FDI flows to Africa fell to $59 billion in 2009 – a 19 per cent decline compared to 2008 – mainly due to contraction in global demand and falling commodity prices. Consequently, outward investment from Africa as a whole contracted by half, to $5 billion. Outflows from Southern Africa, however, expanded to $1.6 billion in 2009, boosted by South African investment, mainly in the rest of Africa. Nevertheless, North Africa remained the largest source of regional outflows, accounting for over 50 per cent of the total. As investment from developed countries
plummet, intraregional FDI gained ground and now accounts for as much as half of the world’s inward FDI stock. This creates a potential opportunity for the SADC to tap from.

Figure 3.3: FDI inflows and outflows by regions in Africa 2000-2009 (Source: UNCTAD, 2010)

After almost a decade of growth (Figure A), FDI flows to Africa declined from a peak of $72 billion in 2008 to $59 billion in 2009, due to the contraction of global demand and the fall in commodity prices. Moreover, cross-border mergers and acquisitions (M&As) in Africa plummeted, and the decline in Greenfield investments was even more severe. The telecommunications industry over this period became the dominant FDI recipient and attracted the largest share of cross-border M&As in Africa with huge transactions such as the $2.4 billion Vodafone deal in South Africa (World Investment Report, 2010).

Contrasting the aforementioned fact was the FDI outflow as indicated in Figure B, which showed a decline of 49 per cent in 2009. This translates to $5 billion in 2009, down from the $9.9 billion recorded in 2008. Outward FDI declined in all sub-regions except Southern Africa, largely due to reinvested earnings from Chinese investment in the country, which acted as a landing spot for other regions on the continent (UNCTAD, 2010; South Africa Info, 2013).

Further studies by the World Investment Prospects Survey - WIPS (2013) indicates that South Africa ranked 15th among the top priority economies for FDI in the world closely followed by Canada, France, Malaysia, Hong Kong, Philippines and Turkey. The acquisition of 20 per cent of the shares of the Standard Bank Group Ltd. by the Industrial & Commercial Bank of China for a record $5,617 million paved the way for the bank to further expand in the sub-region in 2008. The most outstanding milestone was that there were 2,250 South African projects in other African countries in 2009. As a direct result, the SADC region is developing at a fast pace with the concentration of these projects in infrastructure, telecoms, mining and energy.

Just as we cannot discuss FDI without discussing MNCs, so also is the relationship between the activities of these MNCs and the economic agenda of their host governments. Economies do not exist in a vacuum. That is why a mere government pronouncement could increase or decrease the value of shares of an MNC (JSE, 2013). Macroeconomic integration leads to a better-organised manufacturing and trade sector, which in turn, benefits MNCs. This leads us to a discussion on the...
impact of outward direct investment from South Africa on the SADC, and intra-SADC trade flows by country.

Table 3.2 illustrates the fact that South Africa is the economic nerve centre of the SADC region. Although intra-regional trade flows are low by comparison with other regional blocs; that of the SADC tends to be dominated by bilateral flows with South Africa. By 2008, 85 per cent of intra-SADC trade was scheduled to be duty-free. However, due to an asymmetry in the speed at which countries were to reach this point some countries performed better than others: SACU countries and Mauritius eliminated most tariffs on imports from other SADC countries by 2005 to 2006 (Burgess, 2009). According to USAID (2007) Malawi, Mozambique, Tanzania, and Zimbabwe fell behind schedule in reducing their tariffs on intra-SADC trade.

Table 3.2: Outward Direct Investment from South Africa

<table>
<thead>
<tr>
<th>Source: Burgess, 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle-Income Countries 1</td>
</tr>
<tr>
<td>Botswana</td>
</tr>
<tr>
<td>Lesotho</td>
</tr>
<tr>
<td>Namibia</td>
</tr>
<tr>
<td>Swaziland</td>
</tr>
<tr>
<td>Low-Income Countries</td>
</tr>
<tr>
<td>Madagascar</td>
</tr>
<tr>
<td>Malawi</td>
</tr>
<tr>
<td>Mozambique</td>
</tr>
<tr>
<td>Tanzania</td>
</tr>
<tr>
<td>Zambia</td>
</tr>
<tr>
<td>Fragile Countries</td>
</tr>
<tr>
<td>DRC</td>
</tr>
<tr>
<td>Zimbabwe</td>
</tr>
<tr>
<td>Oil Exporter</td>
</tr>
<tr>
<td>Angola</td>
</tr>
</tbody>
</table>

1Mauritius is not reported on here because some South African companies invest in other countries through Mauritian conduits.

South African investment accounts for about 6 per cent of the stock of total FDI in the SADC on average and over 10 per cent in Botswana, the DRC, Malawi, Mozambique, Swaziland, and Zimbabwe (Table 3.2). This has strategically positioned the country to act as a point of symmetry for the region’s plan for macroeconomic integration to be achievable. Although South Africa’s presence in the resources sector seems to be very strong, investments have increasingly taken place in other areas, such as telecommunications, financial services, and retailing.
(Carmody, 2012; SADC, 2012). However, critics are of the view that aside from the absence in most SADC countries of significant manufacturing capacity, the main barriers to intra-regional trade include complex rules of origin (exacerbated by overlapping memberships in preferential trading arrangements other than the SADC) and transit costs and delays (Burgess, 2009; World Trade Report, 2011).

But the most significant binding impact of trade within the SADC is that intra-regional flows in SADC account for about 25 per cent of total trade (Afesorgbor and Bergeijk, 2011) more than in other African region but well below intra-regional trade in more established regional trading blocs. In this regard, intra-regional trade as a percentage of total trade stood at: 12% in the ECOWAS region (Onogwu, Arene and Chidebelu, 2011), 70% in the European Union; 32% in North America; 47% in developing Asia; 27% within Latin America and the Caribbean; and 10% in Africa (Ekra, 2010). Times series data show that the impact of the Regional Trade Agreements (RTAs) on intra-African trade seems to have been small or insignificant. Intra-RTA trade in the major RTAs (SADC, COMESA, ECOWAS, WAEMU and CEMAC) has also grown erratically relative to their trade with the rest of the world, often showing no positive improvement over time (Yang and Gupta 2005: 15; Afesorgbor, 2010; Afesorgbor and Bergeijk, 2011; GhanaWeb, 2013).

Nevertheless, as stated earlier, trade with South Africa accounts for the bulk of these flows (Carmody, 2012; WIPS, 2013). It has been observed by the UNCTAD World Investment Report (2012) that intra-regional trade excluding South Africa comprises only about five per cent of total trade within the region. This accounts for why it has been projected that macroeconomic integration significantly contributes to sustainable growth and development within the SADC.

![Figure 3.4: Intra-SADC trade flows by country (Source: IMF, Direction of Trade Statistics; and UN, Comtrade, 2009)]
According to Burgess (2009) the IMF, Direction of Trade Statistics data indicates that trade within SADC varies significantly by country. A large portion of this trade consists of imports from South Africa, which accounts on average for about one-third of the region’s total imports. This is considerably more than the level of trade in SACU countries. From Figure 3.3 South Africa is a major export market for Namibia, Swaziland, Zambia, and Zimbabwe, while Zambia’s exports to its SADC neighbours have been substantial. However, SADC members account for less than ten per cent of exports from oil rich Angola, the DRC, Madagascar, and Mauritius.

Conclusively, the studies of Laeven and Laryea (2009), as well as, Asonuma, Debrum and Masson (2012) suggest that the extent of financial integration within the region is highest within the Common Monetary Area, in which the currencies of Lesotho, Namibia, and Swaziland are pegged at par to the South African rand. Moreover, it has been observed that an interest rate movement in these countries can be highly synchronised. In addition, South African financial institutions are now dominant within the SADC, accounting for 60 to 90 per cent of banking system assets and deposits in the smaller CMA members, which indicates that macroeconomic integration work seamlessly in the region (Nokaneng, 2009). In essence these banks are the vehicles of MNCs’ FDI transfer to the sub-region. The major function that South African banks perform is to balance the framework of FDIs, so that all countries in the region benefit from the infrastructure and expertise that comes with investment.

### 3.6 SADC regional integration agenda

The SADC’s regional integration agenda is clearly outlined in the Regional Indicative Strategic Development Plan (RISDP), adopted by member states in 2003 (Burgess, 2009). According to Jere (2009) the RISDP is a 15-year regional integration development framework, setting the priorities, policies and strategies for achieving the long-term goals of the SADC. The RISDP established a roadmap for deepening regional integration over a fifteen-year period, outlining a number of targets and milestones to be met along the way. Having achieved two set goals of creating a free trade area in 2008, and forming a customs union by 2010, it is anticipated that by 2016 a monetary union would be created in the sub-region, and pave the way for a single currency by 2018 (Maruping, 2005; Caholo, 2012; SADC, 2012).

**Table 3.3: Macroeconomic convergence targets**

<table>
<thead>
<tr>
<th>Target</th>
<th>2008</th>
<th>2012</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inflation (annual rate)</td>
<td>Single digits</td>
<td>5%</td>
<td>3%</td>
</tr>
<tr>
<td>Fiscal deficit</td>
<td>5% of GDP</td>
<td>3% of GDP as anchor, with a range of 1%</td>
<td>3% of GDP as anchor, with a range of 1%</td>
</tr>
<tr>
<td>Public debt</td>
<td>60% of GDP</td>
<td>60% of GDP</td>
<td>60% of GDP</td>
</tr>
<tr>
<td>Current account deficit</td>
<td>9% of GDP</td>
<td>9% of GDP</td>
<td>3% of GDP</td>
</tr>
</tbody>
</table>

*Source: SADC, 2011*
A study by Rossow (2006) found that in an analysis of economic goals for Africa, it becomes immediately obvious that the macroeconomic convergence goals set for its various regions are important preconditions for long-term stability. The achievement of these goals is a major challenge, and the governments of countries committed to convergence have to apply sound macroeconomic management and policy principles for the goals to be achieved. Achieving these goals definitely contributes to South Africa’s economic stability, economic growth and to job creation.

Table 3.3 shows that the macroeconomic convergence targets were ambitiously set at very low minimum levels. However, the 2008 targets were successfully achieved, despite high inflation figures in fragile states like Democratic Republic of Congo and Zimbabwe (SADC, 2012).

A major economic target in the RISDP is GDP growth of seven per cent a year, which is the pace estimated to be necessary to achieve the Millennium Development Goal (MDG) of halving poverty by 2015 (IMF, 2011; SADC, 2012). The document have also set ambitious targets on diversifying industrial structure and exports, increasing domestic savings and investment, developing and strengthening financial and capital markets, liberalising exchange controls, and linking payments systems within the SADC zone (Madyo, 2008; World Bank, 2012; African Economic Outlook, 2013).

A fundamental benefit of macroeconomic integration is that factors can move freely from a country of surplus to an area of deficit. Hishow (2007) points out that the “returns to capital” paradigm is central in an economic area without barriers to factor movement: Poorer regions offer higher returns per additional unit of capital invested, whereas capital abundant regions suffer low marginal product of capital. Therefore, in searching for better investment opportunities capital moves freely from the rich to the poor regions/economies until capital stock per worker equalises across the FTA area, in this case the SADC. This explains why an economic integration significantly helps to increase MNCs’ FDI initiatives.

Critics of this theory contend that although there may be free labour mobility across nations, free labour reallocation between the member countries is restricted due to various barriers such as language and cultural idiosyncrasy, unemployment benefits, different social insurance systems, and so forth (Hishow, 2006; Agunias, 2009). Free labour mobility must in any case happen, as experienced in South Africa, where labour movement from Botswana, Lesotho, Malawi, Mozambique, Zimbabwe and Swaziland occur due to the manifestations of a sound economy. Citizens of economically stricken countries can gain jobs in prosperous countries. Hence they help production to thrive, in such a way that the output generated can be transported back to other close proximity countries (Rodrique, Comtois and Slack, 2013).
Table 3.4: Performance of SADC member states in relation to 2008 convergence criteria

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(Annual average per cent change)</td>
<td>(Per cent of GDP)</td>
<td>(Per cent of GDP) (Annual per cent change)</td>
<td></td>
</tr>
<tr>
<td>Middle Income Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Botswana</td>
<td>12.6</td>
<td>-3.1</td>
<td>5.0^2</td>
<td>7.0</td>
</tr>
<tr>
<td>Lesotho</td>
<td>10.7</td>
<td>6.2</td>
<td>52.9</td>
<td>-3.2</td>
</tr>
<tr>
<td>Mauritius</td>
<td>8.8</td>
<td>-3.4</td>
<td>54.1</td>
<td>-8.7</td>
</tr>
<tr>
<td>Namibia</td>
<td>10.3</td>
<td>-3.3</td>
<td>23.7</td>
<td>2.3</td>
</tr>
<tr>
<td>South Africa</td>
<td>11.5</td>
<td>-0.6</td>
<td>26.9</td>
<td>-7.4</td>
</tr>
<tr>
<td>Swaziland</td>
<td>13.1</td>
<td>0.1</td>
<td>19.4</td>
<td>-4.4</td>
</tr>
<tr>
<td>Low Income Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Madagascar</td>
<td>9.2</td>
<td>-2.6</td>
<td>30.3</td>
<td>-24.4</td>
</tr>
<tr>
<td>Malawi</td>
<td>8.7</td>
<td>-5.8</td>
<td>10.6</td>
<td>-63</td>
</tr>
<tr>
<td>Mozambique</td>
<td>10.3</td>
<td>-4.0</td>
<td>59.8</td>
<td>-12.6</td>
</tr>
<tr>
<td>Tanzania</td>
<td>10.3</td>
<td>0.0</td>
<td>39.1</td>
<td>-9.7</td>
</tr>
<tr>
<td>Zambia</td>
<td>12.4</td>
<td>-1.5</td>
<td>20.0</td>
<td>-7.4</td>
</tr>
<tr>
<td>Fragile Countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DRC</td>
<td>18.0</td>
<td>-0.1</td>
<td>101.4</td>
<td>-13.4</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>10452.6</td>
<td>-1.8</td>
<td>n.a.</td>
<td>-1.4</td>
</tr>
<tr>
<td>Oil Exporter</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angola</td>
<td>12.5</td>
<td>12.4</td>
<td>11.0</td>
<td>21.2</td>
</tr>
<tr>
<td>SADC</td>
<td>11.6</td>
<td>1.5</td>
<td>26.9</td>
<td>-2.5</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>11.6</td>
<td>2.1</td>
<td>30.3</td>
<td>-1.3</td>
</tr>
</tbody>
</table>

Sources: IMF, African Department database and country desk 2009

^1 Overall balance including grants. ^2 Financial year 2008-09. ^3 Estimates for 2007. ^4 Weighted averages, except for public debt figures, which are median levels.

While developed economies are confronted with a huge recession, growth has accelerated steadily across much of the SADC region over the past decade. Burgess (2009) report shows that the strongest growth within the SADC zone was recorded in Angola, where the economy has been benefiting from increases in oil prices and rising production levels. Also, a growth rate of above or close to seven per cent has been recorded in Malawi, Mozambique and Tanzania, which are traditionally low-income countries in the region. South Africa, however, has been experiencing an average of four to five per cent growth boosted by an increasing domestic demand. Moreover, there has also been growth in Lesotho and Mauritius mainly as a result of a mini-recovery in the textile industry. This trend indicates that almost all economies within the SADC have recorded the growth levels that can sufficiently absorb any shocks that may arise from macroeconomic integration (Green, King and Miller-Dawkins, 2010).

According to the UNCTAD World Investment Report (2012) most countries in the SADC region have, over a considerable time made considerable headway in establishing internal price stability. Zimbabwe however, has been experiencing hyperinflation due to political and land reform issues. This has forced the SADC to place sanctions on the country since hyperinflation creates an asymmetry within the region (Rathumbu, 2008). The impact of the problems in Zimbabwe has seen a decrease in food supply and an increase in commodity prices. This has triggered
inflation in neighbouring countries like South Africa that already have a robust demand network, coupled with an emerging capacity constraints and that has been caused by rising oil prices. The DRC outlook, nonetheless, has been positive. The country has recovered from a war-induced inflation that has gradually gone down in scale (Arieff, 2010; Adebayo, 2012).

It has been noted by the SADC (2012) that there has been a gradual improvement in the fiscal position of most SADC members as they mobilise more domestic revenue and, in the case of low-income countries, more grants. A detailed analysis has shown that a mixture of structural tax reforms have impacted positively on the economic cycle. Moreover, high commodity prices have brought in more revenue, to the point where the median fiscal position (including grants) is now a modest deficit of 1½ per cent of GDP. All SADC countries except Malawi have met the 5 per cent deficit criterion set for 2008 (Burgess, 2009).

It has also been observed that improved fiscal positions, higher growth, and the provision of debt relief have led to a significant reduction in national debt levels within the bloc (Warmerdam and Haan, 2011; Adebayo; 2012; Heshmati and Kim, 2014). Median total government debt in the SADC has fallen to 27 per cent of GDP from 91 per cent in 2000. This improvement has been greatest in low-income countries, all of which benefited from debt relief under the Heavily Indebted Poor Countries (HIPC) initiative and the Multilateral Debt Relief Initiative (Burgess, 2009).

According to Malhotra, McCaffrey, Poole, Solon, Velker and Wei (2011) the macroeconomic targets set for 2012 were ambitious and, in some cases, warranted further evaluation, given that achieving the targets may be neither necessary nor sufficient to achieve good macroeconomic results. The finding of the aforementioned researchers indicates that the SADC has achieved a partial realisation of the 2012 milestone target. The SADC (2012) observes that the striking diversity within the SADC makes these targets achievable for one subgroup, or absolutely unrealistic and/or inappropriate for other groups of member countries. Furthermore, with public debt below the reference value of 60 per cent of GDP (except for DRC Congo), and a current account balance of less than -9 per cent of GDP, except for Madagascar, Mozambique, DRC and Angola, the SADC has performed exceptionally (World Investment Report, 2010).

3.7 The Economic Advantage of SADC over Competing Nations

Literature concerning the SADC integration avers that the region stands to benefit from regional convergence just like other economic blocks worldwide (Lunogelo and Mbilinyi, 2009; SADC, 2012). The UNCTAD World Investment Report (2010) report shows how deeply the recession in Europe and America is worsening productivity in these two continents. As a result, the balance of trade has become more favourable to the SADC bloc with South Africa leading the charts, closely followed by the investing nations of China, India, Malaysia and Singapore.

This leads us to an important theoretical discussion on the economic advantage of the SADC over competing nations. Hishow (2007) theorised that in a two-region world (one advanced and the other underdeveloped), the production of a homogeneous good eventually leads to both regions ending up with the same productivity levels (Aghion, Akcigit and Howitt, 2014). When technological progress is exogenous, that backward economy can freely implement innovations and new
technology, while at the same time accelerating growth. The emergence of South Africa as the most advanced country in the sub-region, working together with a strong Botswana and Angola, helps to dissipate technology and productivity in the region; especially in developing member nations with a fragile economy and a predominantly low income population (Hagerman, 2012; African Economic Outlook, 2013).

According to Barro and Tenreyro (2007) the empirical work on the effects of economic integration (or indeed, other exchange rate arrangements) on trade has been framed within the standard “gravity equation” model. The gravity equation model states that bilateral trade between a pair of countries increases with the sizes of the countries and decreases with their distance. This is broadly construed to include all factors that create “trade resistance”. Further studies carried out by Rose (2000) report that bilateral trade between countries that use the same currency or regulation is over 200 per cent larger than bilateral trade between countries with different currencies or regulations.

Most proponents of the SADC accession strategy are of the view that the geographical proximity of the region, as well as the high levels of trade between member countries, justifies why there is a need for regional integration in the SADC. This is expected to generate greater trade, productivity, harmony and competitiveness within the region (Belle, 2010; Frimpong, 2014).

The major advantage that South Africa stands to gain in the SADC is that, due to the country's terms of trade volatility, which tends to be shared within the CMA Rand zone, an enlarged body significantly reduces trade volatility. Also, a highly tradable GDP share, coupled with the need for diversification, makes Southern Africa fundamentally well suited for economic integration (UNCTAD, 2011). It is therefore envisaged that the small size of most SADC countries and the dependence on trade with South Africa by some countries makes macroeconomic integration fundamentally necessary within the SADC. This definitely helps to counter regional symmetric shocks (Frankel, 2007). The graph below further explains how important the SADC region is to Southern Africa.
Prior to South Africa joining SADC in 1994, intra-SADC trade accounted for 2.6% of regional exports. Since South Africa’s inclusion as a result of the abolition of apartheid, this has increased to 14.5% largely as a result of South African exports to SADC states. Currently, 86% of intra-regional imports are supplied by South Africa, which is depicted in the rising trend of Figure 3.5. Overall, total intra-SADC trade is estimated at 25 per cent of total regional trade, a figure that could increase to 35 per cent once the free trade area is fully implemented (UNCTAD, 2013).

The growth in the SADC composite GDP can be attributed to the displaced trade in the fuel, minerals, ICT and heavy manufacturing sectors of the region’s economy when compared to the rest of the world. However, lower tariffs on agricultural commodities and the light manufacturing sectors of the SADC have provided protection that has aided South Africa’s well established retail industry to thrive and expand to all countries in the region (Negasi, 2009).

When the Eurozone was created in 1999, South Africa’s GDP started a steady percentage point decline, but with the adoption of the Euro currency in 2002, the balance of trade started to tilt in favour of European countries. However, after the SADC member countries implemented bilateral trade agreements with the EU, regional GDP increased by over 250 per cent and continues to grow. It projected that if the regional integration agenda is consistently implemented, by 2018, the SADC would experience a boom that leads to an increase in regional GDP to between two and four percentage points (World Bank, 2012). Furthermore, it is anticipated that due to a positive balance of trade and payments against competing nations (SADC, 2012), many fragile and low-income economies would transit to middle income countries within five years of integration, while South Africa would become a developed country by that time (African Development Bank, 2011; SADC, 2012; World Bank, 2012).
3.8 Strategic Challenges for Multinational Companies in an Integrated SADC

As noted earlier, the SADC is the largest regional economic grouping in sub-Saharan Africa (SSA); it accounts for about half of regional GDP at market exchange rates (NEPAD, 2012). It is also the richest, with real per capita income about two-thirds above the continental average – but there are huge variations in income across the SADC membership. South Africa, the main contributor to regional GDP, accounts for almost two-thirds of total output, although per capita income is higher in Botswana and Mauritius. It is expected that integration would pose stern challenges as well as opportunities for MNCs in South Africa (SADC, 2012).

Historically, southern Africa has experienced substantial waves of labour migration; which include both economically motivated movement (stimulated by differences in earnings and employment opportunities) and forced displacements associated with independence or liberation struggles (Walt, 2007; Burgess, 2009). In the past, large numbers of unskilled and semi-skilled workers from Botswana, Lesotho, Malawi, Mozambique, and Swaziland sought employment in South African mines – the resulting remittances became a major source of foreign earnings for their home countries (Laeven and Laryea, 2009). This inherent mobility of labour is a significant factor that encourages macroeconomic integration.

Nevertheless, these flows have declined in importance over the past decade, as mining production has become more capital intensive. It has been observed that there has been an increasing flow of skilled workers into Botswana, Namibia, and South Africa over the past decade (Mthombeni, 2006). More recently, there has been acceleration in migration from Zimbabwe as the economic situation there has deteriorated, making South Africa the foremost destination for resettlement (Gagnon and Khourour-Castéras, 2012; Weda and Lemmer, 2014).

The major effect of globalisation is that most South African MNCs face stiff competition from foreign players. With MTN, Vodacom and Telkom SA reporting massive returns on regional investment, South African telecom companies have been able to make operating footprints round the continent and even in the Middle East. However, there is a need for these companies to be on guard and checkmate Indian telecoms companies that also have the desire to take over a substantial portion of their market share. It is therefore important for these companies to set up affiliates in India, Pakistan, Bangladesh, Indonesia and Malaysia (Miller, Saunders and Oloyede, 2008).

New research by the JSE (2013) points to the fact that most South African banks have either opened or substantially expanded operations within the region. The annual statements of most of these banks (FirstRand Bank, 2013; Standard Bank, 2012) state clearly that these measures are partly in response to

(1) Extended cross-border activities of larger South African corporations that need banking support, and

---

8 The SADC REC is rivalled by ECOWAS; both RECs have 15 member states. ECOWAS has a combined GDP Purchasing Power Parity (PPP) US$ 703,279 billion, a per capita income of US$ 2,344 and a population of about 300 million persons located in an Area (km²) of 5,112,903. The SADC has a combined GDP Purchasing Power Parity (PPP) US$ 737,335 billion, a per capita income of US$ 3,152 and a population of about 234 million persons located in an Area (km²) of 9,882,959. Source: CIA World Factbook 2012, IMF WEO Database (2012).
A strategic drive to check competition from established international regional players like Barclays and Standard Chartered whose intention is to use their critical mass to take over the SADC financial market (ABSA, 2013; Nedbank, 2013).

Furthermore, there is a need for these banks to finance mega transactions in key industrial, financial, agricultural and services sectors (Bank for International Settlements, 2014). Moreover, there is a strategic need for cross-border banking access as well as inter-country transferable insurance schemes. Standard Bank’s local presence in seventeen African countries, including ten SADC countries, provides a clear advantage that is now being replicated by many other international banks (Standard Bank, 2012).

Recent pressures by the World Bank, IMF and the SADC have made most countries in the sub-region open their economies, thus creating opportunities in areas such as mining, banking and insurance, telecommunications, agriculture and dairy, transport (railways, airlines and ports), retail as well as utilities (SADC, 2012).

According to studies carried out by South Africa Info (2013) South African companies are increasingly looking for investment opportunities in the wider SADC region in a bid to benefit from favourable international markets for minerals, a significant move that has intensified competition with western and Asian companies. More importantly, these investments have become significant because of their social and environmental impacts on people working in, and living around, mines. According to Ferreira, Li and Suk (2009), there is thus a need for these firms to strategically comply with industry requirements and host country laws in order to create strong entry barriers in industries where they operate.

It is Flatters’ (2002) view that American garment buyers support the African Growth and Opportunity Act (AGOA) because they see southern Africa as a competitive source of supply for the US garment market. This is a pointer to the fact that the country produces high quality products. Further liberalisation and integration in the SADC could as well increase the region’s attractiveness in this regard. It is thus envisaged that MNCs in the textile and clothing industry can meet the demanding AGOA requirements by investing in integrated facilities that can produce most or all of the elements in the value chain required to meet the AGOA rules.

This would mean expansion of spinning, weaving and knitting capacities in South Africa and to a lesser extent in Mauritius, as a source of input supply for increased garment producing capacity in lower labour cost locations. For example large-scale input supply is now available in Madagascar. This way, there would be expansion in the industry instead of lay-offs, which have diminished productivity in recent years (Flatters and Elago, 2008). Consequently, MNCs in the industry must support a double transformation rule for garments and other textile products in order to encourage use of regional inputs.

Another important factor that aids South African MNCs’ growth is for the ANC government to invest in industrial parks that link the Common Market for Eastern and Southern Africa (COMESA) and the SADC. There is a need for South African MNCs to invest in such initiatives as Sunway City Integrated Park, which is a national project, aimed at promoting foreign investment by creating a production, commercial and residential hub for the SADC and COMESA (Lunogelo and Mbilinyi, 2009; South
This guarantees access to member nations’ economies. For example, the Industrial Development Corporation of South Africa investment of US$1.5 million to complete a waterworks project and service a low-density residential phase in Zimbabwe would enhance development in that country. This way South Africa’s MNCs curtails the surge of Chinese investors that developed similar projects in Liberia, Nigeria and Egypt (African Economic Outlook, 2011).

Furthermore, there is a need for South African companies to make sure that they respond to employee needs, in such a manner that their businesses are seen as development partners instead of predators in countries where they operate (Carmody, 2012). As the country’s growth in trade moves from isolation to integration, it becomes unnecessary to portray the apartheid era anomalies in new markets. Broadly speaking, South African investment in the region has competed with local companies and performed better than investments by ex-colonial powers.

Recent studies by the Mthombeni (2006), Miller Saunders and Oloyede (2008), as well as, Southern Africa Resource Watch (2010) show that South Africa’s activity in the region appears to be neither of the two extremes, that of a partner or a domator. Companies operating in other African markets, more often than not, are basing investment or project decisions on the merits of each case, and more importantly the desire of the host country to attract foreign direct investment into the country (Mushuku, 2006). South Africa can thus be seen in terms of the global dynamic – not in the region to either rescue it or dominate it, but rather to become part of the increasingly intertwined regional and global fabric (Edigheji, 2007).

According to Kramer, Jenkins and Katz (2007) and Oshikoya (2010), South African businesses contribute to the service sector with regard to investment in information technology and communications. Moreover, these businesses should expand and develop the financial services available in the region and, also, develop local farming with a wider horizon than the local market (e.g. contracting with South African supermarkets like Metcash, Shoprite, Pick ‘n Pay, Massmart, Spar and Woolworths in the region). This way companies can derive enormous margins as a result of forward and backward integration.

Lastly, Southern Africa has a long history of intra-regional migration, dating back to the mid-nineteenth century; this has led to a high labour mobility in the region (Crush, Williams and Peberdy, 2005). There is thus a need for a national policy to provide opportunities to mainstream and retrofit migration notwithstanding the evidence of the role migration plays in crime, infrastructural and job shortages in the country.

The findings of the study conducted by Mweti and Wyk (2009) encourage South African MNCs to adopt corporate social responsibility initiatives, especially in the mining sector where there is need for compensation in case of accidents. Also, there is a general need for companies to focus on sustainable practices that address labour rights, community rights, gender concerns, HIV/AIDS, and a sustainable system of production. This way, an even economic development in the SADC can be promoted; at the same time, with the support of the local community where these businesses operate.
3.9 Chapter Summary

The preceding chapters in this dissertation presented an overview of the concept, growth and importance of multinational companies. The discussion advanced in those chapters also helped to identify and disaggregate the role MNCs play in the host countries and the need for home-country support.

The objective of this chapter was to apply this knowledge in the development of a strategic framework that would help espouse the dynamics of economic integration in the SADC. The discussion in the chapter draws on the lessons learned over the years, and further introduces the importance of the SADC’s economic integration agenda, as well as the challenges facing the implementation of the SADC integration agenda.

The discussion began with a brief summary of the history of the SADC, and proceeds to review the theoretical framework of economic integration and its effects on the SADC. The chapter further identified the SADC regional integration agenda and its economic advantages in relation to competing nations. It ended with a detailed study of the strategic challenges that are unique to MNCs in an integrated SADC.

The next chapter presents a detailed research methodology. Its objective includes illustrating the application of research design parameters in populating and sampling data necessary to test the identified research hypothesis in Chapter 1, and to achieve the stated research objectives.
CHAPTER FOUR

RESEARCH METHODOLOGY

4.1 Introduction

The preceding chapter critically examined the dynamics of economic integration and the implication of this process on MNEs that originate from South Africa in the SADC. This was achieved by interrogating the various forms of economic integration and by clearly articulating the strategic importance of the SADC regional integration agenda. It further stated that the strategic challenges that MNC’s in the SADC experience in an integrated SADC.

Based on the literature review conducted in earlier chapters of this dissertation, the growth of global MNCs and the increased economic integration within the region seems to be important to the success of MNCs that originate in South Africa and operate within the SADC trade bloc. While various studies have been conducted on the merits of regional economic integration, few documented studies have been done in the area of how the strategic expansion of South Africa's MNCs into the SADC can further integrate the SADC region in spite of the challenges that confront these organisations in the expansion and operational processes. Hence, this is one of the contributions of this study to the existing literature.

This study also investigates the challenges that MNCs of South African origin face when investing in the SADC markets, and suggests solutions to the problems found to hinder such operations. Lastly, this research studies the relationship that exists between the growth of South African MNCs and regional economic development as well as investment growth in the SADC. Since the primary focus of this study is to establish the challenges that multinational companies of South African origin face when investing in SADC markets and how to proffer solutions to problems that hinder their operations, it is thus justifiable to conduct an empirical study on this phenomenon (Williams, 2011; Taylor, 2013).

As stated earlier in the introductory section of Chapter One of this study, most of the studies carried out in this area focused on the theory of internationalisation, and usually tend to be descriptive in nature, as those studies did not merge theory with practice. Therefore, it is expected that using secondary data in econometric estimation would help to probe the research questions and test the research hypotheses stated in Section 1.5 of Chapter One.

To arrive at a reliable conclusion on whether or not MNCs in South Africa contribute to the SADC’s regional economic development agenda, empirical research is needed.

This chapter details the research design and methodology, that is, the research process for this study, which is necessary in order to precisely estimate the economic importance of the MNCs in the SADC bloc. Furthermore, this research study agrees with Williams (2007) assertion that the research methodology chapter gives a step-by-step account of the kind of methodology that is applied in gathering and analysing the dataset pertaining to any research study.
4.2 Research Design

Research design is the strategy, the plan, and the structure of conducting a research project (Sumathi and Saravanavel, 2008). According to Ader, Mellenbergh and Hand (2008), research designs are concerned with turning the research question into a testing project. Every design has its positive and negative aspects. The research design is widely considered to be the blueprint for research; dealing with at least four problems - what questions to study, what data are relevant, what data to collect, and how to analyse the results.

Kombrabail (2009) states that a research design is like a roadmap – you see where you currently are, where you want to be at the completion of your journey and can determine the best (most efficient and effective) route to take to get to that destination.

The focus of this research is to test the relationship between various variables (as discussed in Chapter Five of this study) that are deemed appropriate. Therefore this methodology was chosen and adapted because it tested the validity, as well as, the accuracy of the estimates, as informed by the literature (theory) effectively.

The next step after choosing an appropriate empirical approach to this study was to decide whether the research would be qualitative or quantitative. According to Creswell (2012) quantitative research deals with systematic empirical investigation of quantitative properties and phenomena and their relationships. It involves asking a narrow question and collecting numerical data to analyse utilising statistical methods. This author further observes that quantitative research designs are experimental, correlational, and survey oriented. Data realised can be used to establish the existence of associative or casual relationships between variables (Smith and Albaum, 2012; Wetherington, 2010).

Itanyi, Ewurun and Ukpere (2012) posit that quantitative method analyses hard data in the form of numbers, and tests hypotheses that the researcher intends to probe. It deals with concepts in the form of distinct variables, where measures are systematically created before data collection is standardised (Jansen, 2010). For quantitative methods to be successfully adapted in this study, an analysis was carried out using econometric estimation techniques, tables, and/or charts (Creswell, 2013). An ensuing discussion consequently followed in order to explain how they relate to the stated hypotheses of this study.

4.3 Population and Sampling

The population group targeted in this research is divided into two categories, namely the firm level datasets (sourced from South African MNCs via the McGregor BFA database) and the country aggregate datasets that was sourced from the ADI – an arm of the World Bank; these are discussed in detail below.

4.3.1 Description of the Population and Sampling

Aregbeshola (2008) describes a population of study as a statistical parameter upon which a valid judgment can be made. According to this author, population is defined
as a set of entities for which statistical inferences are to be drawn; it is often based on a random sample taken from the population that includes either people or items. Population is also used to refer to a set of potential measurements or values, including not only cases actually observed but also those that are potentially observable (Morvadia, 2014). In this research, the dataset for the firm-level variables to be estimated was generated from the McGregor BFA database. The firm level dataset was elicited for MNCs that originate in South Africa, and have an operational footing in the SADC region. The aggregate dataset was sourced from the World Enterprise Survey, African Development Indicators, and other relevant sources. These datasets cover countries in the SADC that attract MNCs from South Africa.

The description of the population of study cannot be discussed in isolation from its sample, because a sample of the population was used to draw inferences on the entire population. A sample is concerned with the selection of a subset of individuals from within a population to estimate characteristics of the whole population (Groves, Fowler, Couper, Lepkowski, Singer and Tourangeau, 2009). Researchers rarely survey the entire population because the cost of a census may be too high and unaffordable by the researcher. Studies carried out by Solomon (2011), as well as, Zikmund and Babin (2013) suggest that the three main advantages of sampling are that the cost is lower, data collection is faster, and since the data set is smaller, it is possible to ensure homogeneity and to improve the accuracy and quality of the data.

4.3.2 Research Population

The total population for this research comprises all (402) South Africa’s MNCs listed on the Johannesburg Stock Exchange (JSE) that have operations in the SADC. The sample of South African MNC’s used in this study attempted to represent the influence of these firms in the SADC. Likewise, the SADC which comprises of fifteen member states constitute the geographical boundary and sample of this investigation. Therefore, the sample comprised firms whose activities are significant enough to explain their contributions to economic growth in both South Africa and the SADC, and determine whether the regulatory environment of SADC countries hinder their operation.

4.4 Types and Sources of Data

The study employs secondary data to test the stated research hypotheses towards achieving the research objectives. Secondary data was obtained from the McGregor BFA database and the World Enterprise Survey for MNC firm level data, while the SADC country/aggregate dataset was elicited from the African Development Indicators report, as well as other relevant sources to estimate the econometric models. However, firm level datasets was elicited for MNCs that originate from South Africa, and have an operational footing in the SADC region. This study incorporates both sources of data for the sake of validity and reliability of findings. This promotes the objectivity, accuracy, validity and reliability of the study.

4.5 Data Analysis and Processing

The central, totally indispensable part of an investigation is the collection of data (Ngomane, 2010). As such, this study has ensured that both the most suitable datasets and the best statistical models have been adopted in this research.
Afterwards, E-views (7.2) statistical package was used to analyse the dataset collected for the purpose of this study - taking cognisance of the various econometric estimations.

4.5.1 Unit Root Test

The Augmented Dickey-Fuller unit root test was used to test whether the statistical data that is used in the analysis section of this study is stationary (Cowpertwait and Metcalfe, 2009). A stationary process in a time series analysis is a stochastic process whose joint probability distribution does not change when shifted in time (Woodward, Gray and Elliott, 2012). Consequently, parameters such as the mean, standard deviation and variance, if present, also do not change over time and do not follow any trends. The Augmented Dickey-Fuller unit root test was run using EViews of the parametric form below:

$$\Delta y_t = \alpha y_{t-1} + x_t'\delta + \beta_1 \Delta y_{t-1} + \beta_2 \Delta y_{t-2} + \cdots + \beta_p \Delta y_{t-p} + \nu_t \ldots \text{equation 1}$$

Where $y_t$ is a nonstationary series, and the variance of $y$ increases with time and approaches infinity, $x_t$ are optimal exogenous regressors, which may consist of constant, or a constant and trend. While $\beta_1$, $\beta_2$ are coefficients, $\beta_p$ is the coefficient parameter to be estimated. Then, $p$ and $\delta$ are parameters to be estimated, while $\alpha = p - 1$ and $\nu_t$ are transformed residuals, which are vectors of mean zero that is close to white noise.

It has been observed by Granger and Newbold (1974) that when the stochastic process is non-stationary, the use of ordinary least squares (OLS) can produce invalid estimates which they termed “spurious regressions” results yields results with no economic meaning. This study’s use of the OLS statistical method therefore relies on the assumption that the stochastic process is stationary. It then becomes critical that no valid conclusions can be drawn from the regression output if the data is not stationary.

The time-series model adapted for this study was therefore designed to properly handle structural breaks or outliers, as in reality, it is possible that long-run relationship between the underlying variables change. The reason for these changes may be due to technological progress, economic shocks triggered by international market conditions, changes in consumer behaviour, policy or regime alteration, and organisational or institutional developments. It is anticipated that the study’s data is both stationary and reliable, as demonstrated by tests conducted in the succeeding chapter of this study.

4.5.2 Cointegration Test

The study of cointegrating relationships has been a particularly active area of research. It is well known that many economic time series are difference stationary.
In general, a regression involving the levels of these I(1) series produce misleading results, as most tests spuriously show a significant relationship between unrelated series (Sjo, 2011). This study consequently used Johansen cointegrating test to measure the relationship between all variables in the model equation for the study, as a linear combination of two or more I(1) series may be either stationary, or I(0), in which case we say the series are cointegrated (Juselius, 2006). Although there are various tests of cointegration, this study made use of Johansen cointegration test because it uses a system maximum likelihood approach for cointegration analysis and testing, which is supported using vector autoregression (VAR) and group objects. The Johansen cointegrating test was ran using EViews of the VAR form below:

\[ y_t = A_1 y_{t-1} + \ldots + A_p y_{t-p} + \beta x_t + \epsilon_t \]  

\[ \text{equation 2} \]

Where \( y_t \) is a k-vector of non-stationary I(1) variables, \( x_t \) is a deterministic \((d)\)-vector of deterministic variables, and \( \epsilon_t \) is a vector of innovations that denote a white noise process and \( A_1, A_p, \) and \( \beta \) are matrices of coefficients to be estimated.

The Augmented Dickey-Fuller (ADF) Unit Root Test technique was adopted for this study, and the estimations based on the following three regression forms:

1. Without Constant and Trend; \( \Delta Y_t = \delta Y_{t-1} + u_t \)
2. With Constant; \( \Delta Y_t = \alpha + \delta Y_{t-1} + u_t \)
3. With Constant and Trend; \( \Delta Y_t = \alpha + \beta T + \delta Y_{t-1} + u_t \)

Where \( \Delta Y_t \) is the variance of \( Y \) which increase with time and approaches infinity. Also, \( Y \) is a (trend-) stationary series and \( u_t \) is a vector of innovations that denote a white noise process. Further, \( \beta \) is a cointegrating vector, \( T \) and \( \delta \) are parameters to be estimated.

This study uses the Johansen cointegration test because it allows for more than one cointegrating relationship. It is however assumed that the cointegrating vector is constant during the study. More so, in order to ensure a fundamental compliance, reliability and relevance of this study equation model, the test was conducted to test the long run relationship in the associated variables over a long period of time (Hatemi, 2008).

### 4.5.3 Econometrics Estimation Model

This study used the best (most efficient) linear unbiased estimator (BLUE) to estimate the relationship between the econometric model equations in the analysis section of this study (Greene, 2012; Demidenko, 2013). It is expected that the true value of testing parameters efficiently represent the series – and consist of the lowest estimation standard error. The models are expected to adequately represent research questions and test the research hypotheses by helping to explain the phenomena and predict the relationships that exist between the null and alternate
hypotheses. Most importantly, the results presented by these estimations are aimed at aiding the understanding of policy decisions and assisting researchers and industry experts, as well as government policymakers to take appropriate action. The estimations are designed to measure how South African MNCs influence economic growth in both South Africa and the SADC, and suggest whether the regulatory environment of SADC countries hinders the operations of South African MNCs within the region.

\[ Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \cdots + \beta_n X_n + \varepsilon \]  

The regression equation to test Hypothesis 1 is modelled as:

\[ Y = \beta_0 + \beta_1 (\text{MNCSAvt}) + \beta_2 (\text{INFRAS}_t) + \beta_3 (\text{ECFREEDOM}_t) + \beta_4 (\text{EMPtoPOPr}_t) + \beta_5 (\text{RANDv}_t) + \varepsilon \]

Here, \( Y = \text{GDPSA}_t \) is the dependent variable and \( X = \text{MNCSAvt, INFRAS}_t, \text{ECFREEDOM}_t, \text{EMPtoPOPr}_t, \text{RANDv}_t \) are the independent variables.

Where GDPSA\(_t\) measures the GDP of South Africa in year \( t \);  

\( \text{MNCSA}_t \) is the value of South African MNCs contribution to South Africa's economic growth in year \( t \); similarly,

\( \text{INFRAS}_t \) is the level of Infrastructure development in year \( t \);

\( \text{ECFREEDOM}_t \) is the rate of economic freedom in the country in year \( t \);

\( \text{EMPtoPOPr}_t \) is the employment to population ratio in year \( t \);

\( \text{RANDv}_t \) is the value of the Rand in year \( t \);

While, \( \beta_0 \) = Constant factor or term (known as y–Intercept), \( \beta_1 \) = Coefficient of \( \text{MNCSA}_t \), \( \beta_2 \) = Coefficient of \( \text{INFRAS}_t \), \( \beta_3 \) = Coefficient of \( \text{ECFREEDOM}_t \), \( \beta_4 \) = Coefficient of \( \text{EMPtoPOPr}_t \), \( \beta_5 \) = Coefficient of \( \text{RANDv}_t \);

Finally, \( \varepsilon \) is the error term that predicts the matrix of other control variables, including variables of literacy rate, mortality rate, population and poverty gap at $2 a day that are not represented in the model.

The regression equation to test Hypothesis 2 is modelled as:

\[ Y = \beta_0 + \beta_1 (\text{MNCSA}_t) + \beta_2 (\text{INFRASSADC}_t) + \beta_3 (\text{ECFREEDOMSADC}_t) \]
\[ + \beta_4(\text{EMPtoPOPr}_{SADC}) + \beta_5(\text{FDInetinBOPSADC}_{t}) + \epsilon \]

Here, \( Y = GDPSADC_t \) is the dependent variable and \( X = \text{MNCSAv}_{t}, \text{INFRASSADC}_{t}, \text{ECFREEDOMSADC}_{t}, \text{EMPtoPOPrSADC}_{t}, \text{FDInetinBOPSADC}_{t} \) are the independent variables.

Where \( GDPSADC_t \) measures the GDP of the SADC in year \( t \);

\( \text{MNCSAv}_t \) is the value of South African MNCs contribution to regional economic growth and investment in year \( t \);

Similarly,

\( \text{INFRASSADC}_t \) is the level of Infrastructure development in year \( t \);

\( \text{ECFREEDOMSADC}_t \) is the rate of Economic freedom in the SADC in year \( t \);

\( \text{EMPtoPOPrSADC}_t \) is the Employment to Population ratio in year \( t \);

\( \text{FDInetinBOPSADC}_t \) is the Foreign Direct Investment, net inflows (BoP at current US $) in year \( t \);

While, \( \beta_0 \) = Constant factor or term (known as y–Intercept), \( \beta_1 \) = Coefficient of \( \text{MNCSAv}_t \), \( \beta_2 \) = Coefficient of \( \text{INFRASSADC}_t \), \( \beta_3 \) = Coefficient of \( \text{ECFREEDOMSADC}_t \), \( \beta_4 \) = Coefficient of \( \text{EMPtoPOPrSADC}_t \), \( \beta_5 \) = Coefficient of \( \text{FDInetinBOPSADC}_t \);

Finally, \( \epsilon \) is the error term, that predicts the matrix of other control variables, including variables of SADC Literacy rate, SADC mortality rate, SADC population and SADC poverty gap at for instance $2 a day that are not represented in the model.

The regression equation to test Hypothesis 3 is modelled as:

\[ Y = \beta_0 + \beta_1(\text{MNCSAv}_t) + \beta_2(\text{FDInetinBOPSADC}_t) + \beta_3(\text{ECFREEDOMSADC}_t) + \beta_4(\text{TAXPAYSADC}_t) + \beta_5(\text{RANDv}_t) + \epsilon \]

Here, \( Y = \text{REGENVSADCGDP}_t \) is the dependent variable and \( X = \text{MNCSAv}_t, \text{FDInetinBOPSADC}_t, \text{ECFREEDOMSADC}_t, \text{TAXPAYSADC}_t, \text{RANDv}_t \) are the independent variables.

Where \( \text{REGENVSADCGDP}_t \) measures the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution in year \( t \);

\( \text{MNCSAv}_t \) measures the value created by South African MNCs as a result of the targets set by the regulatory authorities in year \( t \); Similarly,
FDInetinBOPSADC\(_t\) is the Foreign Direct Investment, net inflows (BoP at current US $) in year \(t\);

ECFREEDOMSADC\(_t\) is the rate of Economic freedom in the SADC in year \(t\);

TAXPAYSADEC\(_t\) is the Tax payment rate in the SADC in year \(t\);

RAND\(_vt\) is the value of the Rand in year \(t\);

While, \(\beta_0\) = Constant factor or term (known as y–Intercept), \(\beta_1\) = Coefficient of MNCSAv\(_t\), \(\beta_2\) = Coefficient of FDInetinBOPSADC\(_t\), \(\beta_3\) = Coefficients of ECFREEDOMSADC\(_t\), \(\beta_4\) = Coefficients of TAXPAYSADEC\(_t\), \(\beta_5\) = Coefficients of RAND\(_vt\);

Finally, \(\varepsilon\) is the error term, that predicts the matrix of other control variables, including variables CO2 emissions rate and currency value that are not represented in the model.

Each independent variable is associated with a regression coefficient describing the strength and the sign of that variable's relationship to the dependent variable. This model uses regression to predict the dependent variable, by setting known \(Y\) values and using these data to build (or to calibrate) the regression model. The independent or explanatory variables \((X)\) appear on the right side of the equal sign. The dependent variable is assumed to be the function of the explanatory variables.

Furthermore, the regression coefficients \((\beta)\) were computed using the regression tool. This estimates values, one for each explanatory variable, that represent the strength and type of relationship the explanatory variable has with the dependent variable. In addition, the regression intercept \(\beta_0\) represents the expected value for the dependent variable if all of the independent variables are zero. Finally, the residuals, which are the unexplained portion of the dependent variable is represented in the regression equation as the random error term, \(\varepsilon\); and it was used to compensate for the unforeseen errors in the estimation model, as predicted values rarely matched the observed values accurately.

4.5.4 Measurement of Causation

Although the OLS model measures correlation, correlation does not imply causation. For Granger\(^9\) causality was used to measure precedence and the information content of \(x\) and \(y\) using past values of \(y\) and then observing whether adding lagged values of \(x\) can improve the model’s explanation value. \(y\) is Granger-caused by \(x\) if \(x\) helps in the prediction of \(y\), or equivalently if the coefficients on the lagged \(x\)'s are statistically significant.

\(^9\)Clive Granger was awarded the Nobel Memorial Prize in Economic Sciences, in recognition that he and Robert Engle had made discoveries in the analysis of time series data that had changed fundamentally the way in which economists analyse financial and macroeconomic data. Granger causality test is different from the other econometric tests because it assumes that all the variables are endogenous, therefore the researchers do not need to identify whether which variable is endogenous or exogenous.
A lag length, \( l \), that corresponds to the longest time over which one of the variables could help predict the other was chosen using probability estimation technique. The Granger causation was ran using EViews bivariate regressions of the form:

\[
y_t = \alpha_0 + \alpha_1 y_{t-1} + \ldots + \alpha_l y_{t-l} + \beta_1 x_{t-1} + \beta_l x_{t-1} + \epsilon_t \quad \text{equation 4}
\]

\[
x_t = \alpha_0 + \alpha_1 y_{t-1} + \ldots + \alpha_l y_{t-l} + \beta_1 x_{t-1} + \beta_l x_{t-1} + \nu_t \quad \text{equation 5}
\]

Where \( y_t = \) Dependent variable, \( x_t = \) Independent variable, \( \beta_0 = \) Constant factor or term (known as y–Intercept), \( \beta_1 = \) Coefficient of \( x_t \), \( \beta_l = \) Coefficients \( x_t \) lag length, \( \alpha_0 = \) Dummy variables, \( \alpha_1 = \) Dummy variables, \( \alpha_l = \) Dummy variables, \( l = \) Lag length, \( t = \) Year variables, \( \epsilon_t = \) Random error term/residuals and \( \nu_t = \) Random error term/residuals. For all possible pairs of series in the group, the reported F-statistics are the Wald statistics for the joint hypothesis:

\[
\beta_1 = \beta_2 = \ldots = \beta_l = 0 \quad \text{equation 6}
\]

For each equation, the null hypothesis is that \( x \) does not Granger-cause \( y \) in the first regression and that \( y \) does not Granger-cause \( x \) in the second regression. Also, the alternate hypothesis is that \( x \) does Granger-cause \( y \) in the first regression and that \( y \) does Granger-cause \( x \) in the second regression.

\[
H_0: \beta = x = 0 \quad \text{equation 7}
\]

\[
H_a: \beta = y = 1 \quad \text{equation 8}
\]

### 4.5.5 Econometrics Estimation Models Assumption

After studying various outputs of research from scholars such as Ritholtz (2011), Aregbeshola (2012) and the World Bank (2013) economic development indicators, it was observed that most researchers measured industry and government data separately. To that extent, this research measures and tests South African multinational companies data, the South African government data as well as various cumulative SADC datasets. Ritholtz’ (2011) commentary simply supported this notion by stating that “to demonstrate ignorance, unfamiliarity with empirical data, ability to repeat discredited memes, and lack of respect for scientific knowledge, most straw men10 argue against things I have neither said nor even implied.” MNCs’ value can only be precisely measured by market capitalisation worldwide. Wang, Medianu and Whalley (2011) stated that there is an expansion of trade when countries benefit from being recipients of large FDI inflows and global FDI inflows directly contributes to increased market capitalisation.

---

10 The Straw Man fallacy is committed when a person simply ignores a person’s actual position and substitutes a distorted, exaggerated or misrepresented version of that position (Nizkor, 2012). A straw man is a prototype solution to a problem, built on incomplete information and on ideas that have not been fully thought through (MindTools, 2013). By exaggerating, misrepresenting, or just completely fabricating someone’s argument, it’s much easier to present your own position as being reasonable, but this kind of dishonesty serves to undermine honest rational debate.
According to Buffet (2013) who was ranked by Forbes as the world’s wealthiest person in 2008 and as the third wealthiest person in 2011, market capitalisation (wealth of MNCs) to GDP (wealth of nations) is probably the best single measure of where valuations or global comparisons stand at any given moment.

Gross domestic product (GDP) is the market value of all officially recognised final goods and services produced within a country in a given period of time (IMF, 2011). GDP is related to national accounts and can be determined by the product (or output) approach, the income approach, and the expenditure approach. This study therefore assumes that the GDP of South Africa and the SADC can be determined by the formula:

\[ \text{GDP} = C + I + G + (X - M) = R + I + P + SA + W = C + I + G + (X - M) \]…….equation 9

Where \( C = \) Private consumption, \( I = \) Gross investment, \( G = \) Government spending, \( X = \) Exports, \( I = \) Imports, \( R = \) Rents, \( I = \) Interests, \( P = \) Profits, \( SA = \) Statistical adjustments (corporate income taxes, dividends, undistributed corporate profits), \( W = \) Wages, \( C = \) Consumption, \( I = \) Investment, \( G = \) Government spending and \( (X - M) = \) Net exports.

The total value of MNCs (market capitalisation) is calculated by multiplying the number of shares outstanding (this includes the value of all listed categories of a corporation's stocks – e.g. preferred stock, common shares) by the market price per share, which is the current value of a company. For example, if a South African MNC has 10 million shares, and the current price per share is $10, then the company’s market capitalisation or value is (10 million shares x $10), or $100 million.

Salisu and Ajide (2010) examined critically and empirically the causal linkage between stock market development and economic growth. It was found that FDI has a strong positive influence on aggregate growth, and that stock market development (as emphasised by market capitalisation) causes economic growth. This indicates the selection of the market capitalisation as one of the proxies in this study’s time series model. According to Elliott (2008) the Johannesburg Stock Exchange (JSE) which was established in 1887 is not only the oldest exchange but is also the most developed and overshadows all the other SADC exchanges, as its market capitalisation of listed companies as a percentage of GDP is 280.23%.

For the purpose of this study’s econometrics estimation, FDI is defined as the net inflows of investment (inflow minus outflow) to acquire a lasting management interest (10 per cent or more of voting stock) in an enterprise operating in an economy other than that of the investor (World Bank, 2013). According to Mahembe and Odhiambo (2013) FDI net inflows have increased tremendously in the SADC due to decreased regulation, a trend that has favoured South African MNCs operating in the region. Likewise, Dava (2012) stated that an increase in FDI might be associated with improved economic growth due to the influx of capital and increased tax revenues for the host country. It has also been observed that host countries often try to channel FDI investment into new infrastructure and other projects to boost development. Havranek and Irsova (2011) carried out a meta-analysis of the effects of FDI on local firms in developing and transition countries, their study’s conclusion suggests that foreign investment robustly increases local productivity growth and buttresses the
growing importance of this phenomenon. This study consequently used the FDI net inflows as a proxy in the time series model to measure the influence of South African MNCs activities (such as aggregate value chain production and exporting) in the SADC.

Furthermore, it has been observed from previous literature studies (Akpan and Asuquo, 2012; Trade and Development Report. 2013) that the level of infrastructure development can cause a big push, which suggests that countries can jump from one stage of development to another through a virtuous cycle, in which large investments in infrastructure and education coupled with private investments would move the economy to a more productive stage. Therefore, breaking free from economic paradigms characterises the lower productivity stage. According to Ngwira (2010) the lack of adequate infrastructure can hinder potential growth, weaken international competitiveness and adversely affect the SADC poverty reduction efforts. The findings of his study concludes that the poor state of infrastructure in most African countries cuts national economic growth by up to 2 percentage points every year and reduces business productivity by as much as 40%. This study consequently anticipated the impact level of infrastructure has on economic growth in both South Africa and the SADC; as such, created a proxy to represent it in the time series model equation.

It was observed by Haltmaier (2013) that the working age population is an important source of aggregate demand, because of their spending patterns. In addition, Prskawetz, Kögel, Sanderson, and Scherbov (2004) posit that the age structure of a population affects the employment to population ratio and the labour force participation rate. More so, since demographic factors influence growth by changing the employment to population ratio and the labour force participation rate, this study considered it an important econometric variable. High and persistent unemployment, in which inequality increases, has a negative effect on subsequent long-run economic growth. Hence, unemployment can harm growth not only because it is a waste of resources, but also because it generates redistributive pressures and subsequent distortions, drives people to poverty, constrains liquidity by limiting labour mobility, and erodes self-esteem thereby promoting social dislocation, unrest and conflict. Castells-Quintana and Royuela (2012) are of the view that policies aiming at controlling unemployment and, in particular, at reducing its inequality-associated effects support economic growth. More so, industrialisation creates a demographic transition in which birth rates decline and the average age of the population increases, this creates positive externalities that support economic growth (World Investment Report, 2013). Considering the importance of the employment to population ratio to economic growth levels, a proxy was created to represent it in the time series equation model.

According to the Fraser Institute (2014) economic freedom is the extent to which you can pursue economic activity without interference from government, as long as your actions don't violate the identical rights of others. This indicator has been used in
peer-reviewed studies some of which have found a range of beneficial effects of more economic freedom, where it has been observed that economic freedom and higher incomes tend to go together (Economic Freedom Network, 2014). Moreover, Economic Freedom of the World index has been more widely used than any other measure of economic freedom, because of its coverage of a longer time period. The report uses 42 distinct variables from 5 key areas (such as, tax rates, degree of juridical independence, inflation rates, costs of importing, and regulated prices) to produce a weighted score. This study uses the rate of economic freedom as a proxy in the time series model equation, in order to effectively measure the relationship between this phenomenon and economic growth levels in both South Africa and the SADC.

Furthermore, South Africa Info (2013) suggests that tax payment rate contributes either positively or negatively to economic growth regionally. Similarly, in order to achieve SADC macroeconomic convergence targets, it was observed that the tax payment rate either plays an attractive or repulsive role as South African MNCs strive to expand their operations within the region (Rossouw, 2006). This has necessitated the construction of a proxy to represent this trend and measure its effect on economic growth in the time series model equation adopted for this study.

Since it is practically impossible to study economic growth, without estimating the influence of the national currency, this study adopted the Rand as one of the econometric variables. It was observed by Frankel (2007) that the South African rand behaves like currencies of industrialised countries with well-developed financial markets. In particular, high South African interest rates raise international demand for the rand and lead to real appreciation. According to Zuma (2014) the weaker exchange rate poses a significant risk to inflation and also makes South Africa's infrastructure programme more expensive (Exchange Rates, 2012). However, it is expected that South African MNC's, particularly those in the manufacturing sector, take advantage of the weaker Rand. This study therefore attempts to measure the relationship between the value of the Rand and economic growth levels in both South Africa and the SADC. The value of the Rand is thus represented in the time series model equation.

4.5.5.1 Research Hypothesis 1:

The Econometrics estimation model to test Hypothesis 1 is specified as:

\[ \text{GDPSA}_t = f(MNCSAv_t, \text{INFRAS}_t, \text{ECFREEDOM}_t, \text{EMPtoPOPPr}_t, \text{RANDv}_t, \varepsilon) \]

Thus, the regression equation to test Hypothesis 1 is modelled as:

\[ Y = \beta_0 + \beta_1(MNCSAv_t) + \beta_2(\text{INFRAS}_t) + \beta_3(\text{ECFREEDOM}_t) \]
\[ + \beta_4(\text{EMPtoPOPPr}_t) + \beta_5(\text{RANDv}_t) + \varepsilon \]
Where GDPSA$_t$ measures the GDP of South Africa in year $t$;

$\text{MNCSA}_v$ is the value of South African MNCs contribution to South Africa’s economic growth in year $t$; similarly,

$\text{INFRAS}_t$ is the level of Infrastructure development in year $t$;

$\text{ECFREEDOM}_t$ is the rate of economic freedom in the country in year $t$;

$\text{EMPtoPOP}_r$ is the employment to population ratio in year $t$;

$\text{RANDv}_t$ is the value of the Rand in year $t$;

While, $\beta_0 = \text{Constant factor or term (known as } y-\text{Intercept)}$, $\beta_1 = \text{Coefficient of } \text{MNCSA}_v$, $\beta_2 = \text{Coefficient of } \text{INFRAS}_t$, $\beta_3 = \text{Coefficients of } \text{ECFREEDOM}_t$, $\beta_4 = \text{Coefficients of } \text{EMPtoPOP}_r$, $\beta_5 = \text{Coefficients of RANDv}_t$;

Finally, $\epsilon$ is the error term that predicts the matrix of other control variables, including variables of literacy rate, mortality rate, population and poverty gap at $2$ a day that are not represented in the model.

4.5.5.1.1 Variable Identification and Deconstruction

GDPSA$_t$ is the GDP of South Africa in year $t$. It was calculated based on the market value of goods and services produced within the country from 1980 to 2011. The GDP data were accessed from Statistics South Africa's database.

$\text{MNCSA}_v$ measures the value of South African MNCs contribution to South Africa’s economic growth in year $t$. The cumulative value of MNCs in South Africa was measured by the Market capitalisation of the Johannesburg Stock Exchange from 1980 - 2011. The dataset was assessed from Johannesburg Stock Exchange.

$\text{INFRAS}_t$ is the level of Infrastructure development in year $t$. It can be defined as the basic physical systems of a business or nation. It includes investments in transportation, communication, sewage, water and electric systems. Although these systems tend to be high-cost investments, they are vital to a country’s economic development and prosperity. Infrastructure projects may be funded publicly, privately or through public-private partnerships. The data for the level of infrastructure development of South Africa were assessed from the World Bank, World Development Indicators using aggregate datasets from 1980 to 2011.

$\text{ECFREEDOM}_t$ is the rate of Economic freedom in the country in year $t$. It is concerned with the level that the cornerstones of economic freedom such as personal choice, voluntary exchange, freedom to compete and the security of privately owned property. It measures the size of government expenditures, taxes, and enterprises, legal structure and security of property rights, access to sound money, freedom from corruption, financial and investment freedom, freedom to trade internationally, regulation of credit, labour, and business. Variables of the rate of economic freedom were collected from a number of different sources such as the
World Bank, the International Monetary Fund and the Economist Intelligence Unit. The data were assessed from the Fraser Institute from 1980 - 2011.

EMPtoPOPPr\(_t\) is the Employment to Population ratio in year \(t\). The employment to population ratio for persons aged fifteen and above was compared to the total population of the country. These data were assessed under the Labour & Social Protection column of the World DataBank, World Development Indicators (WDI) issued annually by the World Bank. The time period to be covered is 1980 to 2011.

RANDv\(_t\) is the value of the Rand in year \(t\). The value of the Rand is the exchange rate of the Rand to the Dollar. These data were assessed from the Reserve Bank of South Africa. The time series data ran from 1980 to 2011.

4.5.5.1.2 Relationship to be Tested

In order to test the relationship between the dependent variables (DV) and the independent variable (IV), there is a fundamental need for an understanding of what accurately represents the numerical value of the phenomenon to be measured. This becomes relevant when the researcher wants to understand why the interaction of variables causes an effect, and changes the outcome of the phenomenon being studied. It is therefore expected that the IV is the antecedent, whereas the DV is the consequent.

\[ y = f (x), \text{ where } y \text{ is the dependent variable and } x \text{ is the independent variable.} \]

In Hypothesis 1 therefore,

\[ \text{GDPSA}_t = f (\text{MNCSAv}_t, \text{INFRAS}_t, \text{ECFREEDOM}_t, \text{EMPtoPOPPr}_t, \text{RANDv}_t) \]

Where GDPSA\(_t\) is the dependent variable and MNCSAv\(_t\), INFRAS\(_t\), ECFREEDOM\(_t\), EMPtoPOPPr\(_t\), RANDv\(_t\) are the independent variables.

The econometric analysis to test Hypothesis 1 establishes whether there is a relationship between the independent variables (MNCSAv\(_t\), INFRAS\(_t\), ECFREEDOM\(_t\), EMPtoPOPPr\(_t\), RANDv\(_t\) i.e. the value of South African MNCs’ contribution to South Africa’s economic growth <Market capitalisation>), the level of infrastructure development, the rate of economic freedom in the country, the employment to population ratio, the value of the rand respectively) and the dependent variable (GDPSA\(_t\) i.e. the GDP of South Africa. Furthermore, the following relationship was tested:

1. The relationship between the value of South African MNCs and the GDP of South Africa

4.5.5.1.3 Granger Causality

\[ y_t = \text{The dependent variable, was derived from the left hand side of the equation} \]

\[ x_t = \text{The independent variable, was derived from the right hand side of the equation} \]
4.5.5.2 Hypothesis 2: Econometrics estimation model

The Econometrics estimation model to test Hypothesis 2 is specified as follows:

\[
GDPSADC_t = f (MNCSAv_t, \ INFRASSADC_t, \ ECFREEDOMSADC_t, \ EMPtoPOPPrSADC_t, \ FDInetinBOPSADC_t, \ \varepsilon)
\]

Thus, the regression equation to test Hypothesis 2 is modelled as:

\[
Y = \beta_0 + \beta_1 (MNCSAv_t) + \beta_2 (INFRASSADC_t) + \beta_3 (ECFREEDOMSADC_t) + \beta_4 (EMPtoPOPPrSADC_t) + \beta_5 (FDInetinBOPSADC_t) + \varepsilon
\]

Where GDPSADC\(_t\) measures the GDP of the SADC in year \(t\);

MNCSAv\(_t\) is the value of South African MNCs contribution to regional economic growth and investment in year \(t\); Similarly,

INFRASSADC\(_t\) is the level of Infrastructure development in year \(t\);

ECFREEDOMSADC\(_t\) is the rate of Economic freedom in the SADC in year \(t\);

EMPtoPOPPrSADC\(_t\) is the Employment to Population ratio in year \(t\);

FDInetinBOPSADC\(_t\) is the Foreign Direct Investment, net inflows (BoP at current US $) in year \(t\);

While, \(\beta_0\) = Constant factor or term (known as y–Intercept), \(\beta_1\) = Coefficient of \(MNCSAv_t\), \(\beta_2\) = Coefficient of \(INFRASSADC_t\), \(\beta_3\) = Coefficients of \(ECFREEDOMSADC_t\), \(\beta_4\) = Coefficients of \(EMPtoPOPPrSADC_t\), \(\beta_5\) = Coefficients of \(FDInetinBOPSADC_t\);

Finally, \(\varepsilon\) is the error term, that predicts the matrix of other control variables, including variables of SADC Literacy rate, SADC mortality rate, SADC population and SADC poverty gap at for instance $2 a day that are not represented in the model.

4.5.5.2.1 Variable Identification and Deconstruction

GDPSADC\(_t\) is the GDP of the SADC in year \(t\). It was calculated based on the market value of goods and services produced within the SADC region from 1980 to 2011. The GDP data were accessed from Statistics South Africa's database.

MNCSAv\(_t\) measures the value of South African MNCs’ contribution to regional economic growth and investment in year \(t\). The cumulative value of MNCs in South Africa was measured by the Market capitalisation of the Johannesburg Stock
Exchange from 1980 to 2011. The dataset was assessed from Johannesburg Stock Exchange.

INFRASSADC\_t is the level of Infrastructure development in year t. It can be defined as the basic physical systems of a business or nation. It includes investments in transportation, communication, sewage, water and electric systems. Although these systems tend to be high-cost investments, they are vital to a country's economic development and prosperity. Infrastructure projects may be funded publicly, privately or through public-private partnerships. The data for the level of infrastructure development of the SADC were assessed from the World Bank, World Development Indicators (WDI) using aggregate datasets from 1980 to 2011.

ECFREEDOMSADC\_t is the rate of Economic freedom in the SADC in year t. It is concerned with the level that the cornerstones of economic freedom such as personal choice, voluntary exchange, freedom to compete, and the security of privately owned property. It measures the size of government; expenditures, taxes, and enterprises, legal structure and security of property rights, access to sound money, freedom from corruption, financial and investment freedom, freedom to trade internationally, regulation of credit, labour, and business. Variables of the rate of economic freedom were collected from a number of different sources such as the World Bank, the International Monetary Fund and the Economist Intelligence Unit. The aggregate data were assessed from the Fraser Institute from 1980 to 2011.

EMPtoPOPrSADC\_t is the Employment to Population ratio in year t. The employment to population ratio for persons aged fifteen and above was compared to the total population of the SADC. This data were assessed under the Labour & Social Protection column of the World DataBank, World Development Indicators (WDI) issued annually by the World Bank. The time period covered is between 1980 and 2011.

FDInetinBOPSADC\_t is the Foreign Direct Investment, net inflows (BoP at current US $) in year t. It is the net inflows of FDI into the SADC, which is estimated as the Balance of Payments (BoP), which is the difference in total value between payments into and out of the SADC over a time period. This data can be assessed under the Economic Policy & External Debt column of the World DataBank, World Development Indicators (WDI) issued annually by the World Bank. The time period covered was between 1980 and 2011.

4.5.5.2.2 Relationship to be Tested

As stated earlier \( y = f (x) \), where \( y \) is the dependent variable and \( x \) is the independent variable.

In Hypothesis 2 therefore,

\[
GDPSADC\_t = f (\text{MNC\_S\_Av}_t, \text{INFRASSADC}\_t, \text{ECFREEDOMSADC}\_t, \text{EMPtoPOPrSADC}\_t, \text{FDInetinBOPSADC}\_t)
\]

Where \( GDPSADC\_t \) is the dependent variable and \( \text{MNC\_S\_Av}_t \), \( \text{INFRASSADC}\_t \), \( \text{ECFREEDOMSADC}\_t \), \( \text{EMPtoPOPrSADC}\_t \), \( \text{FDInetinBOPSADC}\_t \) are the independent
variables.

The econometric analysis to test Hypothesis 2 establishes whether there is a relationship between the independent variables \(\text{MNCSAv}_t\), \(\text{INFRASSADC}_t\), \(\text{ECFREEDOMSADC}_t\), \(\text{EMPtoPOPrSADC}_t\), \(\text{FDInetinBOPSADC}_t\) *i.e.* the value of South African MNCs contribution to regional economic growth and investment <Market capitalisation>, the level of Infrastructure development, the rate of economic freedom in the SADC, the Employment to Population ratio in the SADC, the Foreign Direct Investment, net inflows <BoP at current US $> respectively) and the dependent variable \(\text{GDPSADC}_t\) *i.e.* the GDP of the SADC. Furthermore, the following relationship was tested:

1. The relationship between the value of South African MNCs and the cumulative GDP of the SADC.

### 4.5.5.2.3 Granger Causality

\[ y_t = \text{The dependent variable, was derived from the left hand side of the equation} \]

\[ x_t = \text{The independent variable, was derived from the right hand side of the equation} \]

### 4.5.5.3 Hypothesis 3

The Econometrics estimation model to test Hypothesis 3 is specified as:

\[ \text{REGENVSA} = f (\text{MNCSAv}_t, \text{FDInetinBOPSADC}_t, \text{ECFREEDOMSADC}_t, \text{TAXPAYSADCr}, \text{RANDv}_t, \varepsilon) \]

Thus, the regression equation to test Hypothesis 3 is modelled as:

\[ Y = \beta_0 + \beta_1(\text{MNCSAv}_t) + \beta_2(\text{FDInetinBOPSADC}_t) + \beta_3(\text{ECFREEDOMSADC}_t) + \beta_4(\text{TAXPAYSADCr}) + \beta_5(\text{RANDv}_t) + \varepsilon \]

Where \(\text{REGENVSA}\) measures the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution in year \(t\);

\(\text{MNCSAv}_t\) measures the value created by South African MNCs as a result of the targets set by the regulatory authorities in year \(t\); Similarly,

\(\text{FDInetinBOPSADC}_t\) is the Foreign Direct Investment, net inflows (BoP at current US $) in year \(t\);

\(\text{ECFREEDOMSADC}_t\) is the rate of Economic freedom in the SADC in year \(t\);

\(\text{TAXPAYSADCr}\) is the Tax payment rate in the SADC in year \(t\);

\(\text{RANDv}_t\) is the value of the Rand in year \(t\);
While, $\beta_0 =$ Constant factor or term (known as y–Intercept), $\beta_1 =$ Coefficient of MNCSAv$_t$, $\beta_2 =$ Coefficient of FDInetinBOPSADC$_t$, $\beta_3 =$ Coefficients of ECFREEDOMSADC$_t$, $\beta_4 =$ Coefficients of TAXPAYSADECr, $\beta_5 =$ Coefficients of RANDv$_t$;

Finally, $\varepsilon$ is the error term, that predicts the matrix of other control variables, including variables CO2 emissions rate and currency value that are not represented in the model.

4.5.5.3.1 Variable Identification and Deconstruction

REGENVSADCGDP$_t$ measures the regulatory environment of SADC countries as it affects the value of the SADCs GDP contribution in year $t$. It was calculated based on how the market value of goods and services produced within the SADC region from 1980 to 2011 was influenced by the regulatory environment. The GDP data were accessed from Statistics South Africa’s database.

MNCSAv$_t$ measures the value created by South African MNCs as a result of the targets set by the regulatory authorities in year $t$. The cumulative value of MNCs in South Africa was measured by the Market Capitalisation of the Johannesburg Stock Exchange from 1980 to 2011. The dataset was accessed from Johannesburg Stock Exchange.

FDInetinBOPSADC$_t$ is the Foreign Direct Investment, net inflows (BoP at current US $) in year $t$. It is the net inflows of FDI into the SADC, which is estimated as the Balance of Payments (BoP), which is the difference in total value between payments into and out of the SADC over a period. This data were accessed under the Economic Policy & External Debt column of the World DataBank, World Development Indicators (WDI) issued annually by the World Bank. The time period covered was between 1980 and 2011.

ECFREEDOMSADC$_t$ is the rate of Economic freedom in the SADC in year $t$. It is concerned with the level that the cornerstones of economic freedom such as personal choice, voluntary exchange, freedom to compete, and the security of privately owned property. It measures the size of government; expenditures, taxes, and enterprises, legal structure and security of property rights, access to sound money, freedom from corruption, financial and investment freedom, freedom to trade internationally, regulation of credit, labour, and business. Variables of the rate of economic freedom were collected from a number of different sources such as the World Bank, the International Monetary Fund and the Economist Intelligence Unit. The aggregate data were accessed from the Fraser Institute from 1980 to 2011.

TAXPAYSADECr is the tax payment rate in the SADC in year $t$. It is a compulsory contribution to state revenue, levied by the government on workers’ income and business profits or added to the cost of some goods, services, and transactions. An aggregate data for the SADC was computed. These data were accessed under the Private Sector column of the World DataBank, World Development Indicators (WDI) issued annually by the World Bank. The time period covered was between 1980 and 2011.
RAND\(_t\) is the value of the Rand in year \(t\). The value of the Rand is the exchange rate of the Rand to the Dollar. These data were accessed from the Reserve Bank of South Africa. The time series data ran from 1980 to 2011.

**4.5.5.3.2 Relationship to be Tested**

As stated earlier \(y = f(x)\), where \(y\) is the dependent variable and \(x\) is the independent variable.

In Hypothesis 3 therefore,

\[
\text{REGENVSADCGDP}_t = f \left( \text{MNCSAv}_t, \text{FDInetinBOPSADC}_t, \text{ECFREEDOMSADC}_t, \text{TAXPAYSADC}r, \text{RANDv}_t \right)
\]

Where \(\text{REGENVSADCGDP}_t\) is the dependent variable and \(\text{MNCSAv}_t, \text{FDInetinBOPSADC}_t, \text{ECFREEDOMSADC}_t, \text{TAXPAYSADC}r, \text{RANDv}_t\) are the independent variables.

The econometric analysis to test Hypothesis 3 established whether there is a relationship between the independent variables (\(\text{MNCSAv}_t, \text{FDInetinBOPSADC}_t, \text{ECFREEDOMSADC}_t, \text{TAXPAYSADC}r, \text{RANDv}_t\) i.e. the value created by South African MNCs as a result of the targets set by the regulatory authorities <Market capitalisation>, the Foreign Direct Investment, net inflows <BoP at current US $>, the rate of Economic freedom in the SADC, the Tax payment rate, the value of the Rand respectively) and the dependent variable (i.e. \(\text{REGENVSADCGDP}_t\) the regulatory environment of SADC countries as it affects the value of the SADCs GDP contribution <SADC GDP>). Furthermore, the following relationships were tested:

1. The relationship between the regulatory environment of SADC countries as it affects the value of SADCs’ GDP contribution and the value created by South African MNCs as a result of the targets set by the regulatory authorities.

2. The relationship between the regulatory environment of SADC countries as it affects the value of the SADC’s GDP contribution and the level of Foreign Direct Investment, net inflows (BoP).

3. The relationship between the regulatory environment of SADC countries as it affects the value of the SADC’s GDP contribution and the rating of economic freedom in the SADC.

4. The relationship between the regulatory environment of SADC countries as it affects the value of the SADCs GDP contribution and the tax payment rate in the SADC.

**4.5.5.3.3 Granger Causality**

\(y_t\) = The dependent variable, was derived from the left hand side of the equation

\(x_t\) = The independent variable, was derived from the right hand side of the equation
4.6 Concerns for Validity and Reliability

The concerns for validity and reliability are vital aspects of any research. It is therefore, absolutely necessary to carry out a precise analysis of the measurement variables. This study assumes that the reliability and validity of datasets in the population increases while the level of sample error and bias reduces drastically due to the credibility of the data sources (Bethlehem, 2009).

Even after a research study has successfully tested all of its hypotheses, the study may still be deemed unreliable and invalid. This necessitated confronting the issue of the validity and reliability of the test statistics. In science and statistics, validity has no single agreed definition but generally refers to the extent to which a concept, conclusion or measurement is well founded and corresponds accurately to the real world (Surhone, Timpledon and Marseken, 2010; Tuimala, 2012). In the area of scientific research design and experimentation, validity refers to whether a study is able to scientifically answer the questions it is intended to answer (Brians, Willnat, Manheim and Rich, 2011; Avula, 2013).

Contemporary research is concerned about both external and internal validity. External validity refers to the extent to which the results of a study are generalisable or transferable (Bradford and Cullen, 2012). Internal validity refers to

(1) The rigour with which the study was conducted and
(2) The extent to which the designers of a study have taken into account alternative explanations for any causal relationships they explore (Fabri, 2007; Jonker and Pennink, 2010).

According to Aregbeshola (2008), the validity of findings is established when a test measures exactly what it claims correctly and credibly of descriptive empirical data it seeks to explain, interpret and account for, before making conclusions for the study. Wisker (2008), however, contends that validity is entirely central to the whole issue of the cohesion in research study between conceptual framework methods, questions and findings.

Reliability on the other hand deals with the consistency of the findings. Trochim (2006) avers that reliability has to do with the quality of measurement. It is the consistency or repeatability of the measures used in a study. Reliability is the consistency of a set of measurements or of a measuring instrument, often used to describe a test. Reliability is inversely related to random error (Wentzel-Larsen, Norekvål, Ulvik, Nygård and Pripp, 2011). Reliability does not imply validity. In terms of accuracy and precision, reliability is analogous to precision, while validity is analogous to accuracy (Betz, Brown and Roman, 2011; Ratner, 2012). Although reliability cannot be calculated; this study tries to maintain an acceptable level of accuracy, as such, reached a valid and reliable conclusion.

4.7 Chapter summary

This chapter discussed the methodology used in conducting this research. It clearly depicted the order of the measures followed in carrying out the research, its mode and instrument of analysis and the basis for arriving at a valid and reliable result. In
summary, this chapter discussed the research design employed for this study. It also justifies why a quantitative approach was used to analyse the ensuing variable, using econometric techniques.

The ensuing chapter presents the data analysis and interpretation section, from which conclusions are drawn with recommendations made about the study.
CHAPTER FIVE

DATA ANALYSIS AND INTERPRETATION

5.1 Introduction

The preceding chapter critically examined the research methodology of this study. This chapter presents the findings of the data that were analysed using Econometric views (EViews 7.2) statistical software. Furthermore, various relationships between the dependent and independent variables were established, in order to identify their influence on this study’s hypotheses.

5.2 Types of Data and the Method of Analysis

As stated earlier in Chapter Four, three of the study hypotheses are tested based on secondary data. The dataset for the firm-level variables to be estimated was generated from the McGregor BFA database. And the aggregate dataset was sourced from the African Development Indicators, (ADI). This dataset covers countries in the SADC. Consequently, a regression analysis was used to establish the relationship between the dependent and independent variables. Furthermore, the period from 1980 to 2011 was chosen as the time frame for this study, since relevant data concerning the parameters of the regression equation were not available before or after this period.

5.3 Presentation of Results

Before the results of this study is presented, it is considered important to present the analysis of the unit root test carried out for all variables as well as test for cointegration. Afterwards, the results of each of the study hypotheses are presented in the same sequential order. The output of the regression equation is presented first, followed by the scatter single graph. This is followed by the actual, fitted, residual table, and then trailed by the Breusch-Godfrey Serial Correlation LM Test, Heteroskedasticity Test (Breusch-Pagan-Godfrey), and Histogram Normality Test. Finally, Pairwise Granger Causality Tests are carried out.

5.3.1 Unit Root Test

The test for Unit Root was conducted in this study using Augmented Dickey-Fuller (ADF) technique. It is assumed that if the series has a unit root, it then becomes non-stationary, or else, it becomes negative and stationary. According to Aregbeshola (2014) the ADF is used in econometrics analysis to test for the presence of Unit Root in a series statistic; this is informed by the strength of the negative test statistics, coupled with the p-value of the estimation. Since this study’s data has a stochastic trend, the Difference-Stationary Process (DSP) was used to transform the time series data into a stationary trend (Woodward, Gray and Elliott, 2012). The results of the Unit Root tests, suggest that the series did not exhibit any statistical indication of the presence of Unit Root, as all the variables tested were stationary at both the first and second difference. Critical values of the variables at their respective significance levels were at either 1% and/or 5% levels (with intercept, intercept and trend, as well as, without an intercept or trend inclusion in the individual series equation).
Table 5.1: Unit Root Test for Hypothesis 1

<table>
<thead>
<tr>
<th>Sn.</th>
<th>Series</th>
<th>Intercept only</th>
<th>Trend and Intercept</th>
<th>No Trend, no Intercept</th>
<th>Intercept only</th>
<th>Trend and Intercept</th>
<th>No Trend, no Intercept</th>
<th>CONCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GDP表现</td>
<td>0.448</td>
<td>-2.205</td>
<td>2.217</td>
<td>-4.333</td>
<td>-4.480</td>
<td>-3.924</td>
<td>-8.878</td>
</tr>
<tr>
<td></td>
<td>(0.992)</td>
<td>(0.470)</td>
<td>(0.992)</td>
<td>(0.002)</td>
<td>(0.007)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-6.725</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>MNC关联</td>
<td>-0.940</td>
<td>-2.473</td>
<td>4.727</td>
<td>-6.305</td>
<td>-3.796</td>
<td>-9.517</td>
<td>-5.414</td>
</tr>
<tr>
<td></td>
<td>(0.794)</td>
<td>(0.338)</td>
<td>(1.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-5.613</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.569)</td>
<td>(0.616)</td>
<td>(0.816)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-5.613</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>ECF自由度</td>
<td>-0.931</td>
<td>-1.938</td>
<td>0.577</td>
<td>-5.485</td>
<td>-5.418</td>
<td>-6.406</td>
<td>-6.278</td>
</tr>
<tr>
<td></td>
<td>(0.765)</td>
<td>(0.811)</td>
<td>(0.835)</td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-6.531</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>EMP收入POP</td>
<td>-2.134</td>
<td>-1.966</td>
<td>0.414</td>
<td>-3.538</td>
<td>-3.457</td>
<td>-5.435</td>
<td>-5.209</td>
</tr>
<tr>
<td></td>
<td>(0.235)</td>
<td>(0.564)</td>
<td>(0.018)</td>
<td>(0.000)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-5.618</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>RAND表现</td>
<td>-2.519</td>
<td>-1.401</td>
<td>1.222</td>
<td>-4.061</td>
<td>-4.505</td>
<td>-5.520</td>
<td>-6.382</td>
</tr>
<tr>
<td></td>
<td>(0.121)</td>
<td>(0.841)</td>
<td>(0.940)</td>
<td>(0.004)</td>
<td>(0.006)</td>
<td>(0.001)</td>
<td>(0.000)</td>
<td>-6.621</td>
</tr>
</tbody>
</table>

As shown on Table 5.1 the ADF test t-statistic in both the 1st and 2nd difference indicates that the absolute values of the entire individual series statistic were more than all the test critical values, while, the p-values of the ADF estimation test statistic was significant at both 1% and 5% levels. In conclusion, all variables are therefore considered stationary and stable, as such, does not have a unit root.

Table 5.2: Unit Root Test for Hypothesis 2

<table>
<thead>
<tr>
<th>Sn.</th>
<th>Series</th>
<th>Intercept only</th>
<th>Trend and Intercept</th>
<th>No Trend, no Intercept</th>
<th>Intercept only</th>
<th>Trend and Intercept</th>
<th>No Trend, no Intercept</th>
<th>CONCLUSION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GDP表现</td>
<td>1.329</td>
<td>-1.690</td>
<td>1.721</td>
<td>-3.518</td>
<td>-3.833</td>
<td>-2.981</td>
<td>-6.518</td>
</tr>
<tr>
<td></td>
<td>(0.998)</td>
<td>(0.731)</td>
<td>(0.977)</td>
<td>(0.014)</td>
<td>(0.029)</td>
<td>(0.004)</td>
<td>(0.000)</td>
<td>-6.378</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.794)</td>
<td>(0.338)</td>
<td>(1.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-8.668</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>INFRAS表现</td>
<td>-0.852</td>
<td>-2.748</td>
<td>0.663</td>
<td>-6.460</td>
<td>-6.341</td>
<td>-6.924</td>
<td>-6.896</td>
</tr>
<tr>
<td></td>
<td>(0.790)</td>
<td>(0.226)</td>
<td>(0.891)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-6.064</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>ECF自由度</td>
<td>-0.002</td>
<td>-2.156</td>
<td>1.451</td>
<td>-5.491</td>
<td>-5.645</td>
<td>-5.207</td>
<td>-6.338</td>
</tr>
<tr>
<td></td>
<td>(0.951)</td>
<td>(0.496)</td>
<td>(0.960)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-6.216</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>EMP收入POP</td>
<td>-1.473</td>
<td>-2.748</td>
<td>1.341</td>
<td>-4.244</td>
<td>-4.447</td>
<td>-4.807</td>
<td>-5.670</td>
</tr>
<tr>
<td></td>
<td>(0.526)</td>
<td>(0.230)</td>
<td>(0.949)</td>
<td>(0.005)</td>
<td>(0.013)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-5.408</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>RAND表现</td>
<td>-0.425</td>
<td>-5.901</td>
<td>1.260</td>
<td>-6.488</td>
<td>-6.379</td>
<td>-6.258</td>
<td>-6.170</td>
</tr>
<tr>
<td></td>
<td>(0.892)</td>
<td>(0.000)</td>
<td>(0.943)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>(0.000)</td>
<td>-6.322</td>
</tr>
</tbody>
</table>

As illustrated on Table 5.2 the ADF test t-statistic in both the 1st and 2nd difference indicates that the absolute values of the entire individual series statistic were more than all the test critical values, while, the p-values of the ADF estimation test statistic was significant at both 1% and 5% levels. In conclusion, all variables are therefore considered stationary and stable, as such, does not have a unit root.
From Table 5.3 the ADF test t-statistic in both the 1st and 2nd difference indicates that the absolute values of the entire individual series statistic were more than all the test critical values, while, the p-values of the ADF estimation test statistic was significant at both 1% and 5% levels. In conclusion, all variables are therefore considered stationary and stable, as such, does not have a unit root.

### 5.3.2 Cointegration Test

Johansen Cointegration test was used in this study to determine whether there is a long run relationship between the econometric variables that was used to test the hypotheses. According to Bayar, Kaya, and Yildirim (2014) the test utilises the eigenvalue of a parameter in order to test whether the series statistic of a variable is cointegrated with another series. It is assumed that the establishment of cointegration among these series rules out any possibilities of a spurious relationship between them and also suggests that a causal relationship must exist in at least one direction (Johansen and Juselius, 1990).

This test also used the Likelihood Ratio, which is referred to as the Trace Statistic to determine cointegration in the group statistics. If there exists any cointegration among the variables, it is possible that there is at least a unidirectional causality relationship among the variables. In this case, causality test among the supposedly cointegrated variables also come up (Kaya, Gulhan and Gungor, 2010). Cointegration in the hypotheses equations were used to verify long-term equilibrium through analysis. This study therefore assumes that a set of time-series variables are cointegrated if they are integrated of the same order and a linear combination of them is stationary. Such linear combinations then point to the existence of a long-term relationship among the variables (Saka and Lowe, 2010).

Since a stochastic process which is non-stationary leads to spurious regression estimates that yield results with no economic meaning, the Johansen Cointegration test was used to further establish the usefulness of this study’s hypothesis group statistic equation over a long period of time (Hatemi, 2008).
Table 5.4: Cointegration Test for Hypothesis 1

<table>
<thead>
<tr>
<th>Hypothesized No. of CE (s)</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>198.8981</td>
<td>95.7536</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>93.45172</td>
<td>69.81889</td>
<td>0.0002</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>48.20655</td>
<td>47.85613</td>
<td>0.0463</td>
</tr>
<tr>
<td>At most 3</td>
<td>23.30032</td>
<td>29.79707</td>
<td>0.2316</td>
</tr>
<tr>
<td>At most 4</td>
<td>9.682874</td>
<td>15.49471</td>
<td>0.3059</td>
</tr>
<tr>
<td>At most 5</td>
<td>0.283816</td>
<td>3.641466</td>
<td>0.5942</td>
</tr>
</tbody>
</table>

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level.
* denotes rejection of the hypothesis at the 0.05 level
** MacKinnon-Haug-Michelis (1999) p-values

<table>
<thead>
<tr>
<th>Hypothesized No. of CE (s)</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>105.4463</td>
<td>40.07757</td>
<td>0.0000</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>45.24518</td>
<td>33.87687</td>
<td>0.0015</td>
</tr>
<tr>
<td>At most 2</td>
<td>24.90623</td>
<td>27.58434</td>
<td>0.1081</td>
</tr>
<tr>
<td>At most 3</td>
<td>13.61745</td>
<td>21.13612</td>
<td>0.3972</td>
</tr>
<tr>
<td>At most 4</td>
<td>9.399058</td>
<td>14.26460</td>
<td>0.2544</td>
</tr>
<tr>
<td>At most 5</td>
<td>0.283816</td>
<td>3.841466</td>
<td>0.5942</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 2 cointegrating eqn(s) at the 0.05 level.
* denotes rejection of the hypothesis at the 0.05 level
** MacKinnon-Haug-Michelis (1999) p-values

As depicted on Table 5.4, the test of cointegration suggests a rejection of the null hypothesis for no cointegration, since p-value is less than 5%. Using the Unrestricted Cointegration Rank Test (Trace), the result suggests that there is statistical evidence to suggest three cointegration equations at 0.05 level. Further, the Unrestricted Cointegration Rank Test (Maximum Eigenvalue) also buttresses the statistical significance of the test, and it alludes to the dominance of the presence of cointegration among the variables tested as this test indicates two cointegrating equations at the 0.05% level.

More so, the test results presented shows that all the six variables are cointegrated; in other words, there is a long run relationship or associationship between them, and that the variables of this study move together.

As earlier stated the establishment of cointegration among these series rules out any possibilities of a spurious relationship between them and also suggests that a causal relationship must exist in at least one direction (Johansen and Juselius, 1990).
Table 5.5: Cointegration Test for Hypothesis 2

<table>
<thead>
<tr>
<th>Hypothesized No. of CE (s)</th>
<th>Trace Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.997873</td>
<td>274.1714</td>
<td>95.7536</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.993754</td>
<td>147.7245</td>
<td>69.8188</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.801404</td>
<td>51.2847</td>
<td>47.8561</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.510756</td>
<td>20.5718</td>
<td>29.7970</td>
</tr>
<tr>
<td>At most 4</td>
<td>0.307618</td>
<td>6.988578</td>
<td>15.4947</td>
</tr>
<tr>
<td>At most 5</td>
<td>0.000202</td>
<td>0.003848</td>
<td>3.641466</td>
</tr>
</tbody>
</table>

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

<table>
<thead>
<tr>
<th>Hypothesized No. of CE (s)</th>
<th>Max-Eigen Statistic</th>
<th>0.05 Critical Value</th>
<th>Prob.**</th>
</tr>
</thead>
<tbody>
<tr>
<td>None *</td>
<td>0.955302</td>
<td>126.4459</td>
<td>40.0775</td>
</tr>
<tr>
<td>At most 1 *</td>
<td>0.840818</td>
<td>96.43972</td>
<td>33.8768</td>
</tr>
<tr>
<td>At most 2 *</td>
<td>0.738504</td>
<td>30.71319</td>
<td>27.58434</td>
</tr>
<tr>
<td>At most 3</td>
<td>0.537818</td>
<td>13.58300</td>
<td>21.13162</td>
</tr>
<tr>
<td>At most 4</td>
<td>0.412910</td>
<td>6.884730</td>
<td>14.26460</td>
</tr>
<tr>
<td>At most 5</td>
<td>0.002756</td>
<td>0.003848</td>
<td>3.641466</td>
</tr>
</tbody>
</table>

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
*denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

From Table 5.5, the test of cointegration suggests a rejection of the null hypothesis for no cointegration, since p-value is less than 5%. Using the Unrestricted Cointegration Rank Test (Trace), the result suggests that there is statistical evidence to suggest three cointegration equations at 0.05 level. Further, the Unrestricted Cointegration Rank Test (Maximum Eigenvalue) also buttresses the statistical significance of the test, and it alludes to the dominance of the presence of cointegration among the variables tested as this test indicates three cointegrating equations at the 0.05% level.

More so, the test results presented shows that all the six variables are cointegrated; in other words, there is a long run relationship or associationship between them, and that the variables of this study move together.

As earlier stated the establishment of cointegration among these series rules out any possibilities of a spurious relationship between them and also suggests that a causal relationship must exist in at least one direction (Johansen and Juselius, 1990).
Table 5.6: Cointegration Test for Hypothesis 3

As illustrated in Table 5.6, the test of cointegration suggests a rejection of the null hypothesis for no cointegration, since p-value is less than 5%. Using the Unrestricted Cointegration Rank Test (Trace), the result suggests that there is statistical evidence to suggest three cointegration equations at 0.05 level. Further, the Unrestricted Cointegration Rank Test (Maximum Eigenvalue) also buttresses the statistical significance of the test, and it alludes to the dominance of the presence of cointegration among the variables tested as this test indicates two cointegrating equations at the 0.05% level.

More so, the test results presented shows that all the five variables are cointegrated; in other words, there is a long run relationship or association between them, and that the variables of this study move together.

As earlier stated the establishment of cointegration among these series rules out any possibilities of a spurious relationship between them and also suggests that a causal relationship must exist in at least one direction (Johansen and Juselius, 1990).
5.4 TEST OF HYPOTHESES

5.4.1 Test of Hypothesis 1

$H_0_1$: Multinational companies in South Africa do not contribute to South Africa’s economic growth.

$H_a_1$: Multinational companies in South Africa contribute to South Africa’s economic growth.

5.4.1.1 Regression Analysis

A linear regression equation model was computed to test the first hypothesis. The equation model assumed that:

$$Y = \beta_0 + \beta_1 (MNCSAv_t) + \beta_2 (INFRAS_t) + \beta_3 (ECFREEDOM_t) + \beta_4 (EMPtoPOPPr_t) + \beta_5 (RAND_v_t) + \epsilon$$

Where $GDPSA_t$ measures the GDP of South Africa in year $t$;

$MNCSAv_t$ is the value of South African MNCs contribution to South Africa’s economic growth in year $t$;

Similarly,

$INFRAS_t$ is the level of infrastructure development in year $t$;

$ECFREEDOM_t$ is the rate of economic freedom in the country in year $t$;

$EMPtoPOPr_t$ is the Employment to Population ratio in year $t$;

$RAND_v_t$ is the value of the Rand in year $t$;

While $Y =$ Dependent variable ($GDPSA_t$); While, $\beta_0 =$ Constant factor or term (known as $y$–Intercept), $\beta_1 =$ Coefficient of $X_1$, $\beta_2 =$ Coefficient of $X_2$, $\beta_3 =$ Coefficients of $X_3$, $\beta_4 =$ Coefficients of $X_4$, $\beta_5 =$ Coefficients of $X_5$; and $\epsilon$ is the error term or residual. After generating the regression equation, the following figures that represent the values of the equation can then be substituted.

$Y_{GDPSA_t} = 103,696,194,566.58 + 43.60 (MNCSAv_t) + (-11,287,047.37) (INFRAS_t) + 19,626,148,560.19 (ECFREEDOM_t) + (-1,895,445,285.34) (EMPtoPOPPr_t) + (-12,781,801,974.24) (RAND_v_t) + \epsilon$

However, log transformation is adopted (i.e. the natural logs of the values of the variables to be analysed, rather than the original raw values of data) in order to resolve the issue of goodness of fit, a dip in residuals and highly skewed distributions of data. This makes patterns in the data more interpretable. Consequently, the resultant log conversion makes the regression equation:
\[ Y_{GDPSAt} = 14.44 + 0.65 (MNCSAvt) + 0.24 \text{ (INFRASt)} + (-0.037) \text{ (ECFREEDOMt)} + (-0.57) \text{ (EMPtoPOPrt)} + (-0.68) \text{ (RANDvt)} + \varepsilon \]

Table 5.7: Least Squares Regression Analysis Output Table for Hypothesis 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>14.43780</td>
<td>1.956243</td>
<td>7.380373</td>
<td>0.0000</td>
</tr>
<tr>
<td>ECFREEDOMt</td>
<td>-0.036000</td>
<td>0.547732</td>
<td>-0.067186</td>
<td>0.9473</td>
</tr>
<tr>
<td>EMPtoPOPrt</td>
<td>-0.586948</td>
<td>0.830318</td>
<td>-0.790462</td>
<td>0.4133</td>
</tr>
<tr>
<td>INFRASt</td>
<td>0.242586</td>
<td>0.217227</td>
<td>1.116737</td>
<td>0.2817</td>
</tr>
<tr>
<td>MNCSAVt</td>
<td>0.649625</td>
<td>0.053603</td>
<td>12.11927</td>
<td>0.0000</td>
</tr>
<tr>
<td>RANDvt</td>
<td>-0.883036</td>
<td>0.142522</td>
<td>-6.92501</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

The R-Squared of 0.953375 (i.e. 95.34 per cent) suggests a positive relationship between the dependent variable and the independent variables. The adjusted $R^2$ of 0.93734 suggests that 94% of the total change in the dependent variable can be attributed to the independent variables. This means that 94 per cent of the variation expressed by $Y$, which is the GDP of South Africa (GDPSAt) can be explained jointly by five independent variables such as the value of South African MNCs contribution to South Africa’s economic growth (MNCSAvt), the level of infrastructure development (INFRASt), the rate of economic freedom (ECFREEDOMt), the Employment to Population ratio (EMPtoPOPrt) and the value of the Rand (RANDvt). However, the remaining six per cent variation can be explained by residuals (error term) or other variables other than MNCSAvt, INFRASt, ECFREEDOMt, EMPtoPOPrt, and RANDvt.

The P value shows that the equation or model employed is statistically significant at the 1% error level (0.0000), indicating that the explanatory variables used are collectively significant in explaining the variations expressed by the dependent variable. This means that the relationship between the dependent variable and the independent variables is statistically significant (since $\text{sig f} < 0.05$ is statistically significant). Likewise, the high F-statistic (61.34) indicates that the regression model explains a significant share of the variation in the dependent variable; this indicates that the variables in this model exhibits high predictive ability.

Furthermore, the coefficient of the regression equation ($\beta_0$) has a non-random known constant\(^\text{11}\) value of 14.43780. An increase in the value of the coefficient adds

\(^{11}\) The econometric implication of a negative coefficient of the regression equation constant “c” is that: as one variable increases, the other variable decreases (Creswell, 2013; Ozer-Balli and Sørensen, 2013). For example, as the number of hunters increases, the deer population decreases. Whereas for a positive coefficient of the regression equation constant “c” the two variables react in the same way, increasing or decreasing together (Sharma, 2010; Anderson, Sweeney and Williams, 2011). For example, as study time increases, the number of errors on an exam decreases. Positive values indicate a relationship between x and y variables such that as values for x increases, values for y also increase. Negative values indicate
to the value of the GDP of South Africa. This means the coefficient of the regression equation ($\beta_0$) has a positive direct relationship with the dependent variable GDPSA$_t$. The positive value indicates a relationship between $\beta_0$ and GDPSA$_t$ such that as values for $\beta_0$ increases, values for GDPSA$_t$ also increases (Huang, Elhorst ;2010).

As a rule of thumb, the Durbin-Watson statistic figure of 2.071240 indicates that there is no serial correlation in the residuals.

**5.4.1.2 Relationship Testing for Hypothesis 1**

1. The relationship between the value of South African MNCs and the GDP of South Africa.

The value of South African MNCs contribution to South Africa’s economic growth; MNCSAv$_t$ (t – statistic$^{12}$ value of 12.11927) shows that the variable is statistically significant. This implies that an increase in South African MNCs contribution to South Africa’s economic growth adds to the GDP growth levels of South Africa. Likewise, the corresponding p value of 0.0000 (00.00 per cent) indicates that MNCSAv$_t$ is statistically significant to influence the value of the dependent variable (since sig f < 0.0500 is statistically significant). This means that the value of South African MNCs contribution to South Africa’s economic growth can individually cause a variation in the dependent variable Y, which is the GDP of South Africa (GDPSA$_t$).

Furthermore, the coefficient of the regression equation ($\beta_2$) has a non-random known constant value of 0.649625. This means the coefficient of the regression equation ($\beta_2$) has a direct positive relationship with the dependent variable GDPSA$_t$. Since MNCSAv$_t$ is a continuous variable, $\beta_2$ represents the difference in the predicted value of GDPSA$_t$ for each one-unit difference in MNCSAv$_t$, if other independent (predictor) variables remain constant. However, the value of South African MNCs’ contribution to South Africa’s economic growth can individually cause a variation in the dependent variable Y, which is the GDP of South Africa (GDPSA$_t$).

This clearly answers the research question stated in the introductory chapter of this study, as the data analysed shows that multinational companies in South Africa contribute to South Africa’s economic growth.

The research objective of this study was also achieved since it has been established that South African MNCs contribute to national economic growth. In the long run, it is expected that the productivity level of the country increases, as these firms expand their operations both locally and regionally. It is also anticipated that due to increased investments in the levels of infrastructure, externalities would be achieved by all sectors of the economy.

---

$^{12}$ A t statistic measures the probability that a parameter value is significant. However, a parameter is said to be statistically significant if there is sufficient evidence that the true value of the parameter does not equal 0. If the t statistic is 2 or greater, then there usually is a 95% probability or better that the parameter estimate does not equal zero (Wooldridge, 2013; Horowitz, 2014).
Figure 5.1: Scatter Single Graph, First vs. All with Fitted Regression Line, and Multiple Series Axis borders Kernel Density for Hypothesis 1

The Scatter single graph above, First vs. All (XY) with fitted regression line on a multiple series graph, shows that the study dataset is well distributed. However, the Kernel density shows that the level, at which a large population of the independent variable is distributed as a random sample from the dependent variable, varies. The thick mass of the Kernel density of MNCSAvt, RANDvt and INFRAst indicates the highest relationship spread with the dependent variable GDPSA regression fit lines. Whereas, the value of the Kernel density of both EMPtoPOPrt and ECFREEDOMt is low when compared to the dependent variable GDPSA regression fit lines.

Figure 5.2: Residuals Graph for Hypothesis 1

<table>
<thead>
<tr>
<th>obs</th>
<th>Actual</th>
<th>Fitted</th>
<th>Residual</th>
<th>Residual Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>25.512</td>
<td>25.508</td>
<td>0.00407</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>25.594</td>
<td>25.482</td>
<td>0.1057</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>25.593</td>
<td>25.659</td>
<td>-0.0662</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>25.634</td>
<td>25.671</td>
<td>-0.0373</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>25.643</td>
<td>25.713</td>
<td>0.0704</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>25.661</td>
<td>25.750</td>
<td>0.0895</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>25.726</td>
<td>25.706</td>
<td>0.0192</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>25.623</td>
<td>25.527</td>
<td>0.0957</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>25.615</td>
<td>25.748</td>
<td>-0.1376</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>25.612</td>
<td>25.659</td>
<td>-0.0477</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>25.480</td>
<td>25.609</td>
<td>-0.1110</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>25.437</td>
<td>25.360</td>
<td>0.0705</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>25.846</td>
<td>25.794</td>
<td>0.0526</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>25.132</td>
<td>25.026</td>
<td>0.0922</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>26.329</td>
<td>26.252</td>
<td>-0.0191</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>26.287</td>
<td>26.427</td>
<td>-0.1378</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>26.379</td>
<td>26.470</td>
<td>0.0904</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>26.339</td>
<td>26.212</td>
<td>0.1275</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>26.368</td>
<td>26.394</td>
<td>-0.0306</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>26.619</td>
<td>26.550</td>
<td>0.0281</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>26.735</td>
<td>26.506</td>
<td>0.1544</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.2: Residuals Graph for Hypothesis 1
The residual graph shows the relationship between the actual and fitted data, as well as the residuals or error terms of the regression equation. It is a normal distribution; a function that represents the distribution of many random variables as a symmetrical bell-shaped graph. And when you sum all the residuals, the value is zero. The residual values therefore, have no serial correlation and heteroskedasticity.

Table 5.8: Residual Diagnostics Test for Hypothesis 1

<table>
<thead>
<tr>
<th>Breusch-Godfrey Serial Correlation LM Test:</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>F-statistic</td>
<td>0.573807</td>
<td>Prob. F(2,13) 0.5770</td>
</tr>
<tr>
<td>Obs*R-squared</td>
<td>1.703460</td>
<td>Prob. Chi-Square(2) 0.4267</td>
</tr>
</tbody>
</table>

Heteroskedasticity Test: Breusch-Pagan-Godfrey

| F-statistic                              | 0.337119 | Prob. F(5,15) 0.8825 |
| Obs*R-squared                            | 2.121442 | Prob. Chi-Square(5) 0.8321 |
| Scaled explained SS                      | 0.610693 | Prob. Chi-Square(5) 0.9875 |

In order to find out whether residuals are serially correlated, residual diagnostics was performed on the residuals through a Breusch-Godfrey Serial Correlation LM Test (with 2 lags). The OBs*R-Squared value of 1.703460 and corresponding P-value (Prob. Chi-Square (2)) of 0.4267 indicates that since the P-value is more than five per cent, this means that the null hypothesis cannot be rejected, it is rather accepted (because residuals are not serially correlated). This indicates that this model has the feature of the best regression model, which is good.

The Breusch-Pagan-Godfrey Heteroskedasticity test is used to check whether the residual value is either heteroskedastic or homoskedastic. The Obs*R-squared value of 2.121442 with its corresponding P-value Prob. Chi Square (5) value of 0.8321 is more than 5 per cent. This means that the null hypothesis cannot be rejected, it is rather accepted. As residuals are not heteroskedastic; they are homoskedastic, which is desirable.

![Figure 5.3: Histogram Normality Test for Hypothesis 1](image)
The Jarque-Bera Histogram Normality test is carried out to test if residuals are normally distributed. The Jarque-Bera P-value of 71.35% means that the null hypothesis cannot be rejected, as it has more than 5 per cent level of significance. Rather, the null hypothesis is accepted; i.e., residuals are normally distributed, which is desirable.

Based on Hypothesis 1 of this study and data analysis:

H\textsubscript{01}: “Multinational companies in South Africa do not contribute to South Africa’s economic growth” is REJECTED WHILE: H\textsubscript{a1}: “Multinational companies in South Africa contribute to South Africa’s economic growth” is ACCEPTED.

Table 5.9 Pairwise Granger Causality Tests for Hypothesis 1

<table>
<thead>
<tr>
<th>Null Hypothesis:</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECFREEDOMT does not Granger Cause GDPSAT</td>
<td>29</td>
<td>1.74207</td>
<td>0.1677</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPSAT does not Granger Cause ECFREEDOMT</td>
<td></td>
<td>0.91403</td>
<td>0.4503</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>EMPTPOPRT does not Granger Cause GDPSAT</td>
<td>18</td>
<td>0.80303</td>
<td>0.5179</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPSAT does not Granger Cause EMPTPOPRT</td>
<td></td>
<td>0.92434</td>
<td>0.4611</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>INFRAST does not Granger Cause GDPSAT</td>
<td>29</td>
<td>0.08881</td>
<td>0.9665</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPSAT does not Granger Cause INFRAST</td>
<td></td>
<td>1.38281</td>
<td>0.2743</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>MNCSAVT does not Granger Cause GDPSAT</td>
<td>29</td>
<td>5.69005</td>
<td>0.0049</td>
<td>NO/REJECT</td>
</tr>
<tr>
<td>GDPSAT does not Granger Cause MNCSAVT</td>
<td></td>
<td>4.91082</td>
<td>0.0092</td>
<td>NO/REJECT</td>
</tr>
<tr>
<td>RANDVT does not Granger Cause GDPSAT</td>
<td>29</td>
<td>1.43008</td>
<td>0.2608</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPSAT does not Granger Cause RANDVT</td>
<td></td>
<td>0.28397</td>
<td>0.6354</td>
<td>YES/ACCEPT</td>
</tr>
</tbody>
</table>

As stated earlier, the OLS model measures correlation, however, correlation does not imply causation. This necessitates pairwise granger causality tests to be carried out on all variables. For Hypothesis 1, the pairwise Granger causality for all combinations of the dependent and independent variables show that each variable does not Granger cause the other, until after three lags. As a rule of thumb, this justifies the choice of this lag length.

Statistically, Granger causality from one variable (y) to the coincident variable (x) is established if the null hypothesis of the asymptotic chi-square test is rejected. A significant test statistic indicates that the x variable has predictive value for forecasting the corresponding movements in y in the series. To establish causality, the null hypothesis of no causality is rejected, as determined by the p-value (<= 0.05) of the series (Aregbeshola, 2014).

When measurement of the precedence and the information content of x and y using past values of y and that of x is carried out, the data shows that at lag three some results change, when lag period changes. This indicates that lag selection really affects results.
MNCSAvₜ Granger Causes GDPSAt as its P-value of 0.0049 is significant, and GDPSAt Granger Causes MNCSAvₜ as its P-value of 0.0092 is also significant. Both null hypotheses are therefore rejected, while the alternate hypotheses are accepted. This means that the value of South African MNCs contribution to South Africa’s economic growth causes the GDP of South Africa to either rise or fall over a lag length of three, just as the value of the GDP of South Africa causes South African MNCs contribution to South Africa’s economic growth to either rise or fall over a lag length of three. As depicted in Table 5.9, eight of the expressions exhibit no causality while the remaining two exhibit causality.

5.4.2 Test of Hypothesis 2

H₀₂: South African Multinational companies do not contribute to regional economic growth and investment in the SADC.

Hₐ₂: South African Multinational companies contribute to regional economic growth and investment in the SADC.

5.4.2.1 Regression Analysis

A linear regression equation model was computed to test the second hypothesis. The equation model assumed that:

\[ Y = \beta_0 + \beta_1 (\text{MNCSAv}_t) + \beta_2 (\text{INFRASSADC}_t) + \beta_3 (\text{ECFREEDOMSADC}_t) + \beta_4 (\text{EMPtoPOPrSADC}_t) + \beta_5 (\text{FDInetinBOPSADC}_t) + \varepsilon \]

Where GDPSADCₜ measures the GDP of the SADC in year t;

MNCSAvₜ is the value of South African MNCs contribution to regional economic growth and investment in year t; similarly,

INFRASSADCₜ is the level of Infrastructure development in year t;

ECFREEDOMSADCₜ is the rate of Economic freedom in the SADC in year t;

EMPtoPOPrSADCₜ is the Employment to Population ratio in year t;

FDInetinBOPSADCₜ is the Foreign Direct Investment, net inflows (BoP at current US $) in year t;

While \( Y = \) Dependent variable (GDPSADCₜ); While, \( \beta_0 = \) Constant factor or term (known as \( y \)-Intercept), \( \beta_1 = \) Coefficient of \( X_1 \), \( \beta_2 = \) Coefficient of \( X_2 \), \( \beta_3 = \) Coefficients of \( X_3 \), \( \beta_4 = \) Coefficients of \( X_4 \), \( \beta_5 = \) Coefficients of \( X_5 \); and \( \varepsilon \) is the error term or residual. After generating the regression, the following figures that represent the values of the equation can then be substituted.

\[ Y_{\text{GDPSADCt}} = 1,620,051,772,846.51 + 69.78 (\text{MNCSAv}_t) + (-4,595,797,027.86) (\text{INFRASSADC}_t) + 37,977,080,715.49 (\text{ECFREEDOMSADC}_t) + (-19,318,989,009.45) (\text{EMPtoPOPrSADC}_t) + 1.23 (\text{FDInetinBOPSADC}_t) + \varepsilon \]
However, log transformation is used (i.e. the natural logs of the values of the variables to be analysed, rather than the original raw values of our data) in order to resolve the issue of goodness of fit, a dip in residuals and highly skewed distributions of data. This makes patterns in the data more interpretable. Consequently, the resultant log conversion makes our regression equation thus:

\[
Y_{GDPSADCt} = 43.49 + 0.71 (MNCSAvt) + (-3.49) (INFRASSADCt) + 0.30 (ECFREEDOMSADCt) + (-3.63) (EMPtoPOPrSADCt) + (-0.05) (FDInetinBOPSADCt) + \varepsilon
\]

Table 5.10: Least Squares Regression Analysis Output Table for Hypothesis 2

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>43.49405</td>
<td>28.18406</td>
<td>1.543214</td>
<td>0.1436</td>
</tr>
<tr>
<td>ECFREEDOMSADCt</td>
<td>0.296006</td>
<td>1.259810</td>
<td>0.234961</td>
<td>0.8174</td>
</tr>
<tr>
<td>EMPTOPOPRESSADCt</td>
<td>-3.634077</td>
<td>7.270737</td>
<td>-0.499822</td>
<td>0.6245</td>
</tr>
<tr>
<td>FDINETINBOPSADCt</td>
<td>-0.051393</td>
<td>0.076523</td>
<td>-0.671608</td>
<td>0.5120</td>
</tr>
<tr>
<td>INFRASSADCt</td>
<td>-3.484842</td>
<td>1.674850</td>
<td>-2.080689</td>
<td>0.0550</td>
</tr>
<tr>
<td>MNCSAVT</td>
<td>0.705029</td>
<td>0.128062</td>
<td>5.505360</td>
<td>0.0001</td>
</tr>
</tbody>
</table>

The R-Squared of 0.906790 (i.e. 90.68 per cent) suggests a positive relationship between the dependent variable and the independent variables. The adjusted R² of 0.875720 suggests that 88% of the total change in the dependent variable can be attributed to the independent variables. This means that 88 per cent of the variation expressed by Y, which is the GDP of the SADC (GDPSADCt) can be explained jointly by five independent variables such as the value of South African MNCs contribution to South Africa’s economic growth (MNCSAvt), the level of Infrastructure development in the SADC (INFRASSADCt), the rate of Economic freedom in the SADC (ECFREEDOMSADCt), the Employment to Population ratio in the SADC (EMPTOPOPRESSADCt) and the Foreign Direct Investment, net inflows (BoP at current US $) in the SADC (FDINETINBOPSADCt). However, the remaining 12 per cent variation can be explained by residuals (error term) or other variables other than MNCSAvt, INFRASSADCt, ECFREEDOMSADCt, EMPTOPOPRESSADCt, and FDINETINBOPSADCt.
The P value shows that the equation or model employed is statistically significant at the 1% error level (0.0000), indicating that the explanatory variables used are collectively significant in explaining the variations expressed by the dependent variable. This means that the relationship between the dependent variable and the independent variables is statistically significant (since sig f < 0.0500 is statistically significant). Likewise, the high F-statistic (29.19) indicates that the regression model explains a significant share of the variation in the dependent variable; this indicates that the variables in this model exhibits high predictive ability.

Furthermore, the coefficient of the regression equation ($\beta_0$) has a non-random known constant value of 43.49405. An increase in the value of the coefficient adds to the value of the GDP of the SADC (GDPSADC$_t$). This means the coefficient of the regression equation ($\beta_0$) has a positive direct relationship with the dependent variable GDPSADC$_t$. The positive value indicates a relationship between $\beta_0$ and GDPSADC$_t$ such that as values for $\beta_0$ increases, values for GDPSADC$_t$ also increases (Huang, Elhorst, 2010).

As a rule of thumb, the Durbin-Watson statistic figure of approximately 2 indicates that there is no serial correlation in the residuals.

5.4.2.2 Relationship Testing for Hypothesis 2

1. The relationship between the value of South African MNCs and the cumulative GDP of the SADC.

The value of South African MNCs contribution to South Africa’s economic growth; MNCSAv$_{t}$ t statistic value of 5.505360 indicates that the variable is statistically significant. This implies that an increase in South African MNCs contribution to South Africa’s economic growth adds to the cumulative GDP growth level of the SADC. Likewise, the corresponding p value of 0.0001 (0.00 per cent) indicates that MNCSAv$_{t}$ is statistically significant to influence the value of the dependent variable (since sig f < 0.0500 is statistically significant). This means that the value of South African MNCs contribution to South Africa’s economic growth can individually cause a variation in the dependent variable Y, which is the GDP of South Africa (GDPSA$_t$).

Furthermore, the coefficient of the regression equation ($\beta_2$) has a non-random known constant value of 0.705029. This means the coefficient of the regression equation ($\beta_2$) has a direct positive relationship with the dependent variable (GDPSADC$_t$). Since MNCSAv$_{t}$ is a continuous variable, $\beta_2$ represents the difference in the predicted value of GDPSADC$_t$ for each one-unit difference in MNCSAv$_{t}$, if other independent (predictor) variables remain constant. However, the value of South

---

13 The econometric implication of a negative coefficient of the regression equation constant “c” is that: as one variable increases, the other variable decreases (Creswell, 2013; Ozer-Balli and Sørensen, 2013). For example, as the number of hunters increases, the deer population decreases. Whereas for a positive coefficient of the regression equation constant “c” the two variables react in the same way, increasing or decreasing together (Sharma, 2010; Anderson, Sweeney and Williams, 2011). For example, as study time increases, the number of errors on an exam decreases. Positive values indicate a relationship between x and y variables such that as values for x increases, values for y also increase. Negative values indicate a relationship between x and y such that as values for x increase, values for y decrease (Wetcher-Hendricks, 2011; Gerbing, 2014).

14 A t statistic measures the probability that a parameter value is significant. However, a parameter is said to be statistically significant if there is sufficient evidence that the true value of the parameter does not equal 0. If the t statistic is 2 or greater, then there usually is a 95% probability or better that the parameter estimate does not equal zero (Wooldridge, 2013; Horowitz, 2014).
African MNCs’ contribution to South Africa’s economic growth can individually cause a variation in the dependent variable Y, which is the cumulative GDP of the SADC (GDPSADCₜ).

This clearly answers the research question stated in the introductory chapter of this study, as the data analysed shows that multinational companies in South Africa contribute to the SADC’s economic growth.

The research objective of this study was also achieved since it has been established that South African MNCs contribute to both national and regional economic growth. In the long run, it is expected that the productivity level of the country/region increases, as these firms expand their operations both locally and regionally. It is also anticipated that due to increased investments in the levels of infrastructure within the SADC, externalities would be achieved by all sectors of the economy.

Figure 5.4: Scatter Single Graph, First vs. All with Fitted Regression Line, and Multiple Series Axis Borders Kernel Density for Hypothesis 2

The Scatter single graph above, First vs. All (XY) with fitted regression line on a multiple series graph shows that the study dataset is well distributed.

However, the Kernel density shows that the level, at which a large population of the independent variable is distributed as a random sample from the dependent variable, varies. The thick mass of the Kernel density of MNCSAvₜ and FDInetinBOPSADCₜ indicates the highest relationship spread with the dependent variable GDPSADCₜ regression fit lines. Whereas, the value of the Kernel density of EMPtoPOPrSADCₜ, INFRASSADCₜ and ECFREEDOMSADCₜ is low when compared to the dependent variable GDPSADCₜ regression fit lines.
The residual graph shows the relationship between the actual and fitted data, as well as the residuals or error terms of the regression equation. It is a normal distribution; a function that represents the distribution of many random variables as a symmetrical bell-shaped graph. And when you sum all the residuals, the value is zero. The residual values therefore have no serial correlation and heteroskedasticity.

Table 5.11: Residual Diagnostics Test for Hypothesis 2

Breusch-Godfrey Serial Correlation LM Test:

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>1.629700</th>
<th>Prob. F(2,13)</th>
<th>0.2336</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs*R-squared</td>
<td>4.209712</td>
<td>Prob. Chi-Square(2)</td>
<td>0.1219</td>
</tr>
</tbody>
</table>

Heteroskedasticity Test: Breusch-Pagan-Godfrey

<table>
<thead>
<tr>
<th>F-statistic</th>
<th>0.476682</th>
<th>Prob. F(5,15)</th>
<th>0.7881</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obs*R-squared</td>
<td>2.879272</td>
<td>Prob. Chi-Square(5)</td>
<td>0.7186</td>
</tr>
<tr>
<td>Scaled explained SS</td>
<td>0.711107</td>
<td>Prob. Chi-Square(5)</td>
<td>0.9824</td>
</tr>
</tbody>
</table>

In order to find out whether residuals are serially correlated, residual diagnostics was performed on the residuals through a Breusch-Godfrey Serial Correlation LM Test (with 2 lags). The Obs*R-Squared value of 4.209712 and corresponding P-value (Prob. Chi-Square (2)) of 0.1219 indicates that since the P-value is more than 5% means that the null hypothesis cannot be rejected, it is rather accepted (residuals are not serially correlated). This indicates that this model has the feature of the best regression model, which is good.

The Breusch-Pagan-Godfrey Heteroskedasticity test is used to check whether the residual value is either heteroskedastic or homoskedastic. The Obs*R-squared value of 2.879272 with its corresponding P-value Prob. Chi Square (5) value of 0.7186 is more than five per cent. This means that the null hypothesis cannot be rejected, it is...
rather accepted; since the residuals are not heteroskedastic, they are homoskedastic - which is desirable.

Figure 5.6: Histogram Normality Test for Hypothesis 2

The Jarque-Bera Histogram Normality test is carried out to test if the residuals are normally distributed. The Jarque-Bera P-value of 43.55% means that the null hypothesis cannot be rejected, as it has more than five per cent significance, rather we accept null hypothesis, that is, residuals are normally distributed, which is desirable.

Based on Hypothesis 2 of this study and data analysis:

H$_{02}$: “South African Multinational companies do not contribute to regional economic growth and investment in the SADC” is REJECTED WHILE: H$_{a2}$: “South African Multinational companies contribute to regional economic growth and investment in the SADC” is ACCEPTED.

Table 5.12 Pairwise Granger Causality Tests for Hypothesis 2

<table>
<thead>
<tr>
<th>Null Hypothesis</th>
<th>OBS</th>
<th>F-Statistic</th>
<th>Prob.</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECFREEDOMSADCT does not Granger Cause GDPADCT</td>
<td>30</td>
<td>0.00747</td>
<td>0.4164</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPADCT does not Granger Cause ECFREEDOMSADCT</td>
<td>2</td>
<td>2.40311</td>
<td>0.1110</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>EMPTOPOPRSDADCT does not Granger Cause GDPADCT</td>
<td>19</td>
<td>1.69181</td>
<td>0.1674</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPADCT does not Granger Cause EMPTOPOPRSDADCT</td>
<td>1</td>
<td>0.11749</td>
<td>0.8903</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>FDNINETINBOPSDADCT does not Granger Cause GDPADCT</td>
<td>30</td>
<td>17.8283</td>
<td>1.5427</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPADCT does not Granger Cause FDNINETINBOPSDADCT</td>
<td>4</td>
<td>4.73594</td>
<td>0.0181</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>INFRAASSADCT does not Granger Cause GDPADCT</td>
<td>30</td>
<td>0.20778</td>
<td>0.8133</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>GDPADCT does not Granger Cause INFRAASSADCT</td>
<td>1</td>
<td>0.74644</td>
<td>0.4643</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>MNCSAVT does not Granger Cause GDPADCT</td>
<td>30</td>
<td>4.34241</td>
<td>0.0225</td>
<td>NO/REJECT</td>
</tr>
<tr>
<td>GDPADCT does not Granger Cause MNCSAVT</td>
<td>2</td>
<td>2.40825</td>
<td>0.1034</td>
<td>YES/ACCEPT</td>
</tr>
</tbody>
</table>
It is a known fact that the OLS model measures correlation; however, correlation does not imply causation. This necessitates the researcher to compute the Pairwise Granger Causality test. The pairwise Granger causality for all combinations of the dependent and independent variables shows that each variable does not Granger cause the other (except in two instances). The null hypothesis is therefore accepted in all cases, as the F-Statistic corresponding P-value is not significant enough to be rejected over 2 lag periods.

When measurement of the precedence and the information content of $x$ and $y$ using past values of $y$ and those of $x$ was carried out, the data showed that: $\text{FDInetinBOPSADC}_t$ does not Granger Cause $\text{GDPSADC}_t$ as its P-value of 1.5427 is insignificant, however, $\text{GDPSADC}_t$ Granger Causes $\text{FDInetinBOPSADC}_t$ as its P-value of 0.0181 is significant. Therefore, the null hypothesis was rejected in the second instance, while the alternate hypothesis was accepted. This means that the level of FDI, net inflows (BoP at current US $) does not cause the cumulative GDP of the SADC to either rise or fall over a lag length of 2. However, the cumulative GDP of the SADC causes the level of FDI, net inflows (BoP at current US $) to either rise or fall over a lag length of 2. There is therefore, a uni-directional causality between $\text{GDPSADC}_t$ and $\text{FDInetinBOPSADC}_t$.

More so, it was observed that there is a correlation between the value of South African MNCs’ contribution to regional economic growth and investment in the SADC and the cumulative GDP of the SADC, and that $\text{MNCSAv}_t$ does Granger cause $\text{GDPSADC}_t$ as its P-value of 0.0225 is significant, but $\text{GDPSADC}_t$ does not Granger cause $\text{MNCSAv}_t$. There is therefore a unidirectional causality between the value of South African MNCs contribution to regional economic growth and investment in the SADC ($\text{MNCSAv}_t$) and the cumulative GDP of the SADC ($\text{GDPSADC}_t$). Conclusively, as depicted in Table 5.12, eight of the expressions do not exhibit causality, however, two expressions exhibit causality.

**5.4.3 Test of Hypothesis 3**

$H_0^3$: The regulatory environment of SADC countries does not hinder the operations of South African MNCs within the region.

$H_a^3$: The regulatory environment of SADC countries hinders the operations of South African MNCs within the region.

**5.4.3.1 Regression Analysis**

A linear regression equation model was computed to test the third hypothesis. The equation model assumed that:

$$ Y = \beta_0 + \beta_1(MNCSAv_t) + \beta_2(\text{FDInetinBOPSADC}_t) + \beta_3(\text{ECFREEDOMSADC}_t) + \beta_4(\text{TAXPAYSADC}_t) + \beta_5(\text{RANDv}_t) + \epsilon $$

Where $\text{REGENVSADCGDP}_t$ measures the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution in year $t$;

$\text{MNCSAv}_t$ measures the value created by South African MNCs as a result of the targets set by the regulatory authorities in year $t$; Similarly,
FDInetinBOPSADC_t is the Foreign Direct Investment, net inflows (BoP at current US $) in year t;

ECFREEDOMSADC_t is the rate of economic freedom in the SADC in year t;

TAXPAYSADEC_t is the tax payment rate in the SADC in year t;

RANDv_t is the value of the Rand in year t;

While Y = Dependent variable (REGENVSADCGDP_t); While, $\beta_0$ = Constant factor or term (known as y–Intercept), $\beta_1$ = Coefficient of $X_1$, $\beta_2$ = Coefficient of $X_2$, $\beta_3$ = Coefficients of $X_3$, $\beta_4$ = Coefficients of $X_4$, $\beta_5$ = Coefficients of $X_5$; and $\varepsilon$ is the error term or residual. After generating the regression equation, the following figures that represent the values of the equation can then be substituted.

$$Y_{\text{REGENVSADCGDP}} = (-98,920,367,268.79) + 60.44 \text{ (MNCSAv}_t\text{)} + 5.15 \text{ (FDInetinBOPSADC}_t\text{)} + 67,293,602,046.49 \text{ (ECFREEDOMSADC}_t\text{)} + (-1,219,812,135.73) \text{ (TAXPAYSADEC}_t\text{)} + (-25,292,252,021.51) \text{ (RANDv}_t\text{)} + \varepsilon$$

However, log transformation is adopted (i.e. the natural logs of the values of the variables are analysed, rather than the original raw values of data) in order to resolve the issue of goodness of fit, a dip in residuals and highly skewed distributions of data. This makes patterns in the data more interpretable. Consequently, the resultant log conversion makes our regression equation thus:

$$Y_{\text{REGENVSADCGDP}} = 11.77 + 0.64 \text{ (MNCSAv}_t\text{)} + 0.04 \text{ (FDInetinBOPSADC}_t\text{)} + 0.95 \text{ (ECFREEDOMSADC}_t\text{)} + (-0.09) \text{ (TAXPAYSADEC}_t\text{)} + (-0.75) \text{ (RANDv}_t\text{)} + \varepsilon$$

Table 5.13: Least Squares Regression Analysis Output Table for Hypothesis 3

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>11.77392</td>
<td>1.648765</td>
<td>7.141052</td>
<td>0.0000</td>
</tr>
<tr>
<td>ECFREEDOMSADCt</td>
<td>0.950160</td>
<td>0.967423</td>
<td>0.982155</td>
<td>0.3416</td>
</tr>
<tr>
<td>FDINETINBOPSADCt</td>
<td>0.036076</td>
<td>0.062933</td>
<td>0.573242</td>
<td>0.5750</td>
</tr>
<tr>
<td>MNCSAvT</td>
<td>0.637970</td>
<td>0.065367</td>
<td>9.759875</td>
<td>0.0000</td>
</tr>
<tr>
<td>RANDvT</td>
<td>-0.746086</td>
<td>0.178367</td>
<td>-4.182872</td>
<td>0.0008</td>
</tr>
<tr>
<td>TAXPAYSADECt</td>
<td>-0.065216</td>
<td>0.364834</td>
<td>-0.233574</td>
<td>0.8185</td>
</tr>
</tbody>
</table>

R-squared: 0.943737  Mean dependent var: 26.27430
Adjusted R-squared: 0.924982  S.D. dependent var: 0.455523
S.E. of regression: 0.124765  Akaike info criterion: -1.088813
Sum squared resid: 0.233495  Schwarz criterion: -0.791378
Log likelihood: 17.44303  Hannan-Quinn criter: -1.025045
F-statistic: 50.32064  Durbin-Watson stat: 1.920042
Prob(F-statistic): 0.000000

128
The R-Squared of 0.943737 (i.e. 94.37 per cent) suggests a positive relationship between the dependent variable and the independent variables. The adjusted $R^2$ of 0.924982 suggests that 93% of the total change in the dependent variable can be attributed to the independent variables. This means that 93 per cent of the variation expressed by Y, which is the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution ($\text{REGENVSADCGDP}_t$) can be explained jointly by five independent variables such as the value created by South African MNCs as a result of the targets set by the regulatory authorities in the SADC (MNCSAv$_t$), the Foreign Direct Investment, net inflows (BoP at current US $) in the SADC ($\text{FDInetinBOPSADC}_t$), the rate of economic freedom in the SADC ($\text{ECFREEDOMSADC}_t$), the tax payment rate in the SADC ($\text{TAXPAYSADC}_t$) and the value of the Rand ($\text{RANDv}_t$). However, the remaining seven per cent variation can be explained by residuals (error term) or other variables other than MNCSAv$_t$, FDInetinBOPSADC$_t$, ECFREEDOMSADC$_t$, TAXPAYSADC$_t$ and RANDv$_t$.

The P value shows that the equation or model employed is statistically significant at 1% error level (0.0000). This means that the relationship between the dependent variable and the independent variables is statistically significant (since sig f < 0.0500 is statistically significant). The high F-statistic (50.32) indicates that the regression model explains a significant share of the variation in the dependent variable.

Furthermore, the coefficient of the regression equation ($\beta_0$) has a non-random known constant$^{15}$ value of 11.77392. An increase in the value of the coefficient adds to the level of the regulatory environment of SADC countries. This means the coefficient of the regression equation ($\beta_0$) has a positive direct relationship with the dependent variable $\text{REGENVSADCGDP}_t$. The positive value indicates a relationship between $\beta_0$ and $\text{REGENVSADCGDP}_t$ such that as values for $\beta_0$ increases, values for $\text{REGENVSADCGDP}_t$ also increase (Huang, Elhorst, 2010). (2011)

As a rule of thumb, the Durbin-Watson statistic figure of approximately 2 indicates that there is no serial correlation in the residuals.

5.4.3.2 Relationship Testing for Hypothesis 3

1. The relationship between the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution and the value created by South African MNCs as a result of the targets set by the regulatory authorities.

The value created by South African MNCs as a result of the targets set by the regulatory authorities in the SADC; MNCSAv$_t$ – statistic$^{16}$ value of 9.759875 indicate that the variable is statistically significant. This means that an increase in the value created by South African MNCs as a result of the targets set by the regulatory

$^{15}$ The econometric implication of a negative coefficient of the regression equation constant “c” is that: as one variable increases, the other variable decreases (Creswell, 2013; Ozer-Balli and Sørensen, 2013). For example, as the number of hunters increases, the deer population decreases. Whereas for a positive coefficient of the regression equation constant “c” the two variables react in the same way, increasing or decreasing together (Sharma, 2010; Anderson, Sweeney and Williams, 2011). For example, as study time increases, the number of errors on an exam decreases. Positive values indicate a relationship between x and y variables such that as values for x increases, values for y also increase. Negative values indicate a relationship between x and y such that as values for x increase, values for y decrease (Wetcher-Hendricks, 2011; Gerbing, 2014).

$^{16}$ A t statistic measures the probability that a parameter value is significant. However, a parameter is said to be statistically significant if there is sufficient evidence that the true value of the parameter does not equal 0. If the t statistic is 2 or greater, then there usually is a 95% probability or better that the parameter estimate does not equal zero (Wooldridge, 2013; Horowitz, 2014).
authorities in the SADC adds to the regulatory environment of SADC countries, as it significantly affects the value of the SADC’s GDP contribution. Likewise, the corresponding p value of 0.0000 (00.00 per cent) indicates that MNCSAvt is statistically significant to influence the value of the dependent variable (since sig f < 0.0500 is statistically significant). This means that the value created by South African MNCs as a result of the targets set by the regulatory authorities in the SADC can individually cause a variation in the dependent variable Y, which is the value of the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution (REGENVSADCGDP₁).

Furthermore, the coefficient of the regression equation (β₁) has a non-random known constant value of 0.637970. This means the coefficient of the regression equation (β₁) has a positive direct relationship with the dependent variable REGENVSADCGDP. Since MNCSAvt is a continuous variable, β₁ represents the difference in the predicted value of REGENVSADCGDP for each one-unit difference in MNCSAvt, if other independent (predictor) variables remain constant.

2. The relationship between the regulatory environment of SADC countries as it affects the value of the SADC’s GDP contribution and the level of Foreign Direct Investment, net inflows (BoP).

The value of the level of Foreign Direct Investment, net inflows (BoP) in the SADC; FDInetinBOPSADCt t – statistic value of 0.573242 indicates that the variable is statistically insignificant. This means that an increase in the level of Foreign Direct Investment, net inflows (BoP) in the SADC does not add to the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution. Likewise, the corresponding p value of 0.5750 (57.50 per cent) indicates that FDInetinBOPSADCt is statistically insignificantly influences the value of the dependent variable (since sig f < 0.0500 is statistically significant). This means that the level of Foreign Direct Investment, net inflows (BoP) in the SADC cannot individually cause a variation in the dependent variable Y, which is the value of the regulatory environment of SADC countries, as it affects the value of SADC’s GDP contribution (REGENVSADCGDP₁).

Furthermore, the coefficient of the regression equation (β₂) has a non-random known constant value of 0.036076. This means the coefficient of the regression equation (β₂) has a positive direct relationship with the dependent variable REGENVSADCGDP. Since FDInetinBOPSADCt is a continuous variable, β₂ represents the difference in the predicted value of REGENVSADCGDP for each one-unit difference in FDInetinBOPSADCt, if other independent (predictor) variables remain constant. However, the level of Foreign Direct Investment, net inflows (BoP) in the SADC cannot individually cause a variation in the dependent variable Y, which is the value of the regulatory environment of SADC countries, as it affects the value of SADC’s GDP contribution (REGENVSADCGDP₁).

3. The relationship between the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution and the rating of Economic freedom in the SADC.
The rating of economic freedom in the SADC; $ECFREEDOMSADC_t$ – statistic value of $0.982155$ indicates that the variable is statistically insignificant. This means that an increase in the rating of economic freedom in the SADC does not add to the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution. Likewise, the corresponding p value of $0.3416$ (34.16 per cent) indicates that $ECFREEDOMSADC_t$ statistically insignificantly influences the value of the dependent variable (since sig f < 0.0500 is statistically significant). This means that the rating of economic freedom in the SADC cannot individually cause a variation in the dependent variable $Y$, which is the value of the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution ($REGENVSADCGDP_t$).

Furthermore, the coefficient of the regression equation ($\beta_3$) has a non-random known constant value of $0.950160$. This means the coefficient of the regression equation ($\beta_3$) has a positive direct relationship with the dependent variable $REGENVSADCGDP_t$. Since $ECFREEDOMSADC_t$ is a continuous variable, $\beta_3$ represents the difference in the predicted value of $REGENVSADCGDP_t$ for each one-unit difference in $ECFREEDOMSADC_t$, if other independent (predictor) variables remain constant. However, the rating of economic freedom in the SADC cannot individually cause a variation in the dependent variable $Y$, which is the value of the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution ($REGENVSADCGDP_t$).

4. The relationship between the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution and the Tax payment rate in the SADC.

The Tax payment rate in the SADC; $TAXPAYSADCr_t$ – statistic value of $-0.233574$ indicates that the variable is statistically insignificant. This means that an increase in the tax payment rate in the SADC does not add to the regulatory environment of SADC countries as it affects the value of SADC’s GDP contribution. Likewise, the corresponding p value of $0.8185$ (81.85 per cent) indicates that $TAXPAYSADCr_t$ statistically insignificantly influences the value of the dependent variable (since sig f < 0.0500 is statistically significant). This means that the tax payment rate in the SADC cannot individually cause a variation in the dependent variable $Y$, which is the value of the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution ($REGENVSADCGDP_t$).

Furthermore, the coefficient of the regression equation ($\beta_4$) has a non-random known constant value of $-0.085216$. This means the coefficient of the regression equation ($\beta_4$) has an inverse relationship with the dependent variable $REGENVSADCGDP_t$. Since $TAXPAYSADCr_t$ is a continuous variable, $\beta_4$ represents the difference in the predicted value of $REGENVSADCGDP_t$ for each one-unit difference in $TAXPAYSADCr_t$, if other independent (predictor) variables remain constant. However, the tax payment rate in the SADC cannot individually cause a variation in the dependent variable $Y$, which is the value of the regulatory environment of SADC countries as it affects the value of SADCs GDP contribution ($REGENVSADCGDP_t$).
This clearly answers the research question stated in the introductory chapter of this study, as the data analysed shows that the regulatory environment of SADC countries hinders the operations of South African MNCs within the region. It therefore, clearly points to the fact that the major challenges faced by South African MNCs’ operating within the SADC zone face includes the high tax payment rate in the SADC, and the reoccurring instability associated with the value of the Rand. More so, it was established that the rate of economic freedom in the SADC affects the competitiveness of South African MNCs operating within the region.

The research objective of this study was also achieved since it has been established that the challenges faced by South African MNCs’ operating within the SADC zone is mainly associated with the high tax rate which acts as an import barrier to regional trade. This trend also, affects the value of the Rand and causes the monetary and fiscal policy to adversely change. In the long run, it is expected that the productivity levels of the SADC improves as regional integration within the zone deepens. It is also anticipated that a high degree of economic freedom, as well as, increased competitiveness within the SADC, creates externalities that would drive economic growth and investment levels across all sectors of the economy.

Figure 5.7: Scatter Single Graph, First vs. All with Fitted Regression Line, and Multiple Series Axis Borders Kernel Density for Hypothesis 3

The Scatter single graph above, First vs. All (XY) with fitted regression line on a multiple series graph shows that the study dataset is well distributed.

However, the Kernel density shows that the level at which a large population of the independent variable is distributed as a random sample from the dependent variable, varies. The thick mass of the Kernel density of MNCSAvt, FDInetinBOPSAADCt and RANDvt indicates the highest relationship spread with the dependent variable REGENVSADCGDPt, regression fit lines. Whereas, the value of the Kernel density of
ECFREEDOMSADC<sub>t</sub> and TAXPAYSADC<sub>Cr</sub> is low when compared to the dependent variable REGENVSADC<sub>GDP</sub><sub>t</sub> regression fit lines.

![Figure 5.8: Residuals Graph for Hypothesis 3](image)

The residual graph shows the relationship between the actual and fitted data, as well as the residuals or error terms of the regression equation. It is a normal distribution; a function that represents the distribution of many random variables as a symmetrical bell-shaped graph. And when you sum all the residuals, the value is zero. The residual values therefore have no serial correlation and heteroskedasticity.

### Table 5.14: Residual Diagnostics Test for Hypothesis 3

<table>
<thead>
<tr>
<th>obs</th>
<th>Actual</th>
<th>Fitted</th>
<th>Residual</th>
<th>Residual Plot</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>25.6873</td>
<td>25.7925</td>
<td>0.10443</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>25.8906</td>
<td>25.7238</td>
<td>-0.16688</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>25.0017</td>
<td>25.8636</td>
<td>0.03619</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>25.5026</td>
<td>25.9635</td>
<td>-0.06095</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>26.0048</td>
<td>26.1603</td>
<td>-0.16152</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>26.0039</td>
<td>26.0956</td>
<td>0.00886</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>26.0520</td>
<td>26.0697</td>
<td>-0.03763</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>25.9286</td>
<td>25.8481</td>
<td>0.08052</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>25.0279</td>
<td>25.0932</td>
<td>0.06527</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>25.5412</td>
<td>25.0300</td>
<td>-0.06953</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>25.8855</td>
<td>25.9937</td>
<td>-0.12823</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>25.9463</td>
<td>25.7548</td>
<td>0.08143</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>26.1927</td>
<td>26.1066</td>
<td>0.08600</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>26.4419</td>
<td>26.4145</td>
<td>0.02738</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>26.5410</td>
<td>26.6981</td>
<td>-0.15710</td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>26.7777</td>
<td>26.7931</td>
<td>0.01545</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>26.8055</td>
<td>26.8850</td>
<td>-0.07951</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>26.6471</td>
<td>26.6439</td>
<td>0.02027</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>26.8318</td>
<td>26.8379</td>
<td>0.00716</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td>27.0536</td>
<td>27.0132</td>
<td>0.03746</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>27.1972</td>
<td>27.0695</td>
<td>0.13126</td>
<td></td>
</tr>
</tbody>
</table>

The Breusch-Godfrey Heteroskedasticity test is used to check whether the residual value is either heteroskedastic or homoskedastic. The Obs*R-squared value of 4.292291 with its corresponding P-value Prob. Chi Square (5) value of 0.5081 is

In order to find out whether residuals are serially correlated, residual diagnostics was performed on the residuals through a Breusch-Godfrey Serial Correlation LM Test (with 2 lags). The OBs*R-Squared value of 2.917905 and corresponding P-value (Prob. Chi-Square (2)) of 0.2325 indicates that since the P-value is more than five per cent and this means that the null hypothesis cannot be rejected, it is rather accepted (because the residuals are not serially correlated). This indicates that this model has the feature of the best regression model, which is good.
more than five per cent. This means that the null hypothesis cannot be rejected, it is rather accepted. As residuals are not heteroskedastic, they are homoskedastic, which is desirable.

Figure 5.9: Histogram Normality Test for Hypothesis 3

The Jarque-Bera Histogram Normality test is carried out to test if our residuals are normally distributed. The Jarque-Bera P-value of 59.14% means that the null hypothesis cannot be rejected, as it has more than five per cent significance, it is rather accepted; i.e., residuals are normally distributed, which is desirable.

Based on Hypothesis 3 of this study and data analysis:

H_{03}: “The regulatory environment of SADC countries does not hinder the operations of South African MNCs within the region” is REJECTED WHILE: H_{a3}: “The regulatory environment of SADC countries hinders the operations of South African MNCs within the region” is ACCEPTED.

Table 5.15 Pairwise Granger Causality Tests for Hypothesis 3

<table>
<thead>
<tr>
<th>Null Hypothesis:</th>
<th>Obs</th>
<th>F-Statistic</th>
<th>Prob.</th>
<th>DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECFREEDOMSADCPT does not Granger Cause REGENVSADCGDPT</td>
<td>30</td>
<td>0.90747</td>
<td>0.4154</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>REGENVSADCGDPT does not Granger Cause ECFREEDOMSADCPT</td>
<td>2.40311</td>
<td>0.1110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDINETINBOPSAADCPT does not Granger Cause REGENVSADCGDPT</td>
<td>30</td>
<td>17.823</td>
<td>1.5427</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>REGENVSADCGDPT does not Granger Cause FDINETINBOPSAADCPT</td>
<td>4.73394</td>
<td>0.0191</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MNCSAVT does not Granger Cause REGENVSADCGDPT</td>
<td>30</td>
<td>4.43421</td>
<td>0.0229</td>
<td>NO/REJECT</td>
</tr>
<tr>
<td>REGENVSADCGDPT does not Granger Cause MNCSAVT</td>
<td>2.40655</td>
<td>0.1034</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RANDVT does not Granger Cause REGENVSADCGDPT</td>
<td>30</td>
<td>4.06576</td>
<td>0.0238</td>
<td>YES/ACCEPT</td>
</tr>
<tr>
<td>REGENVSADCGDPT does not Granger Cause RANDVT</td>
<td>0.50184</td>
<td>0.6115</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAXPAYSADCR does not Granger Cause REGENVSADCGDPT</td>
<td>19</td>
<td>3.87152</td>
<td>0.0459</td>
<td>NO/REJECT</td>
</tr>
<tr>
<td>REGENVSADCGDPT does not Granger Cause TAXPAYSADCR</td>
<td>2.90348</td>
<td>0.0845</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As stated earlier, the OLS model measures correlation. However, correlation does
not imply causation. This necessitates pairwise Granger causality tests to be carried out on all variables. The pairwise Granger causality for all combinations of the dependent and independent variables shows that not all variables Granger cause the others. The null hypothesis is therefore accepted in all cases, were the F-Statistic corresponding P-value is not significant.

When measurement of the precedence and the information content of \( x \) and \( y \) using past values of \( y \) and that of \( x \) is carried out, the data shows that: \( \text{REGENVSADCGDP}_t \) Granger Cause \( \text{FDInetinBOPSADC}_t \) as its P-value of 0.0181 is significant, but \( \text{FDInetinBOPSADC}_t \) does not Granger Cause \( \text{REGENVSADCGDP}_t \). This means that the regulatory environment of SADC countries causes the level of FDI, net inflows (BoP at current US $) in the SADC to either rise or fall over a lag length of two. However, the level of FDI net inflows (BoP at current US $) in the SADC does not cause the regulatory environment of SADC countries to either rise or fall over a lag length of two. There is therefore a unidirectional causality between \( \text{REGENVSADCGDP}_t \) and \( \text{FDInetinBOPSADC}_t \).

Moreover, \( \text{MNCSAv}_t \) Granger Cause \( \text{REGENVSADCGDP}_t \) as its P-value of 0.0225 is significant, but \( \text{REGENVSADCGDP}_t \) does not Granger cause \( \text{MNCSAv}_t \). This means that the value created by South African MNCs as a result of the targets set by the regulatory authorities in the SADC causes the regulatory environment of SADC countries to either rise or fall over a lag length of two. There is therefore a unidirectional causality between \( \text{MNCSAv}_t \) and \( \text{REGENVSADCGDP}_t \). Similarly, \( \text{RANDv}_t \) Granger Cause \( \text{REGENVSADCGDP}_t \) as its P-value of 0.0298 is significant, but \( \text{REGENVSADCGDP}_t \) does not Granger Cause \( \text{RANDv}_t \). This means that the value of the Rand causes the regulatory environment of SADC countries to change over a lag length of 2. There is therefore, a unidirectional causality between \( \text{RANDv}_t \) and \( \text{REGENVSADCGDP}_t \).

Furthermore, it was observed that, \( \text{TAXPAYSADCr}_r \) Granger Causes \( \text{REGENVSADCGDP}_t \), as its P-value of 0.0459 is significant. But \( \text{REGENVSADCGDP}_t \) does not Granger cause \( \text{TAXPAYSADCr}_r \). This means that the tax payment rate of the SADC can cause the regulatory environment of SADC countries to change within 2 lag periods. There is therefore, a uni-directional causality between \( \text{TAXPAYSADCr}_r \) and \( \text{REGENVSADCGDP}_t \). Conclusively, as depicted in Table 5.15, six of the expressions does not exhibit causality, however, four expressions exhibit causality.

5.5 INTERPRETATION OF FINDINGS

The findings of this research are interpreted based on the results generated from secondary data that were analysed using EViews software.

From the analyses above, all of three alternative hypotheses “Multinational companies in South Africa contribute to South Africa’s economic growth”, “South African Multinational companies contribute to regional economic growth and investment in the SADC”, and “The regulatory environment of SADC countries hinders the operations of South African MNCs within the region” were accepted, while the entire null hypothesis of this study was rejected.
Also, from the regression analysis, it was observed that there is a positive relationship between the contribution of South African multinational companies to both South Africa and the SADC’s economy, and the Gross Domestic Product of both South Africa and the SADC. Furthermore, it was observed that there is a negative relationship between the regulatory environment of SADC countries and the contribution of South African multinational companies operating within the region.
CHAPTER SIX
SUMMARY OF FINDINGS, RECOMMENDATIONS AND CONCLUSIONS

6.1 Introduction

The previous chapter presented the results of the study hypotheses that were tested. The firm-level variables and the aggregate dataset variables were generated from the McGregor BFA database and the African Development Indicators database respectively. Consequently, estimates that were generated from these databases were measured, analysed and interpreted to achieve the study objectives, as well as to test the research hypotheses. Furthermore, regression analysis was used to establish the relationship between the dependent and independent variables. And finally, since the OLS model only measures correlation, Johansen cointegration tests, and pairwise Granger causality for all combinations of the dependent and independent variables were computed to show whether a variable does not granger cause the other.

This chapter aims at presenting the summary of findings and then recommending the necessary measures that strategically positions South African MNCs in order to benefit from the rapid integration of the SADC.

6.2 Findings of the Research

The findings of this research are summarised to enable reliable conclusions to be drawn from the investigation that was carried out for both the theoretical and empirical literatures. Subsequently, recommendations are made. However, this chapter focuses mainly on the empirical aspect of the research.

6.2.1 The Theoretical Research

The study set out to investigate the strategic importance of regional economic integration to multinational companies (MNCs) in South Africa, with special reference to South African MNCs operating within the SADC region. In the literature review section, the researcher found out that most firms make the most critical decision that influence the operation of their business when they choose to internationalise. Moreover, it was observed that most South African MNCs usually begin operation in the SADC market when they engage in exporting, licensing, and franchising activities. However, their impact on the domestic (host) economy become more active when turnkey projects, joint ventures, mergers and acquisitions, and wholly owned subsidiaries are set up in foreign markets. The literature review investigation found that the most successful companies selected an appropriate entry mode coupled with an expansion strategy.

Furthermore, since markets have different barriers to entry, it became essential to understand the market entry barriers that impede multinational companies of South African origin from penetrating other African markets. The findings of the literature study were that regional integration help to reduce custom duties, direct and indirect tariffs that impede trade activities and strategically position South African MNCs ahead of competing nations from Asia such as China and India.
The findings of the study further illustrated that rapid technological change was the main driver of market integration and globalisation (Rugman, Verbeke and Nguyen, 2011). Therefore, for these companies to remain competitive there is a great need to distribute their products more widely and quickly, in order to cope with environmental change, competition and reduce cost. The literature study also established that once a firm engages in Foreign Direct Investment (FDI), it becomes a multinational company. Likewise, various theories of multinational enterprise (such as trade theories, industrial organisation theories, transaction cost/internalisation theories) and foreign direct investment theories (such as monopolistic advantage theory, product life cycle, theory of comparative advantage, internationalisation of market theory, international product eclectic theory and the new generation FDI theory) conclude that the economic impact of South African MNCs on their host market economies in the SADC was positive, which makes it a significant find of the study.

After reviewing all the theories of multinational enterprise and foreign direct investment, the general outcome of the findings of this research is that MNCs contribute to filling the six gaps (see Figure 2.1) in the SADC (because by composition the organisation is made up of less developed countries excluding South Africa that is an upper middle income country). Hence, by bringing in scarce capital, generating exports and substituting for imports, contributing to local taxes, enhancing local skills, creating jobs, generating opportunities for local entrepreneurs from the development of ancillary trade and industry through the diffusion of technology, the six gaps can thus be filled adequately. It is therefore unequivocally correct that South African MNCs are strategically positioned to proffer solutions that can help break the vicious cycle of poverty in SADC countries.

Finally, the findings of the literature review pointed out that macroeconomic integration triggers an economic accession that leads to a geometric progression in the levels of trade carried out by South African MNCs in the SADC. Another significant find of the literature review is that the adoption of a currency union in the SADC in the future would lead to a fundamental decrease in foreign exchange trading transaction costs. As such, it would put an end to destabilising currency shifts (which is a common phenomenon) within the SADC. This leads to greater price stability, an essential condition that is absolutely necessary for increased trade, sustained growth and development in the region to take place.

6.2.2 The Empirical Research

Chapter Five focused primarily on data analysis and the interpretation of the ensuing results from the study’s statistical analysis. First of all unit root tests was conducted to test whether all the econometric variables were stable. And then Johansen Cointegration Test was used to determine the long-term relationship between the econometric variables that were used to test the hypotheses. In Chapter Five, various relationships between the dependent and independent variables were established, in order to identify their influence on the study hypotheses. Three of the research hypotheses were tested using Ordinary Least Square regression (OLS) analysis due to its appropriateness for the sample population and its reliability. However, residual tests were conducted, and then trailed by the Breusch-Godfrey Serial Correlation LM Test, Heteroskedasticity Test (Breusch-Pagan-Godfrey), and Histogram Normality Test in order to ensure the model possesses the characteristics
of the best regression model. Finally, Pairwise Granger Causality Tests were carried out to identify short-term causation among the variables.

6.2.3 Inference

On the whole, the regression test conducted to test whether multinational companies in South Africa contribute to South Africa’s economic growth, and whether South African Multinational companies contribute to regional economic growth and investment in the SADC, as well as the preceding hypothesis that tested whether the regulatory environment of SADC countries hinders the operations of South African MNCs within the region, proved reliable and appropriate to measure the research problems identified in the literature study. For the entire hypothetical statements, a conclusion was reached on the basis of evidence and reasoning; this indicated that the strategic importance of regional economic integration to South African multinational companies (MNCs) operating within the SADC positively influenced their operations (either exogenously or endogenously). However, these were not the only variables that stimulate competitiveness of South African MNCs in the SADC region. Finally, it was observed that the results generated were conclusively similar in nature to those generated by earlier researchers (as indicated in the literature review section of this dissertation).

6.2.4 The Findings of the Unit Root Test

The results of the Unit Root tests for the three hypotheses, suggest that the series did not exhibit any statistical indication of the presence of Unit Root, as all the variables tested were stationary \((i.e., \text{stable})\) at both the first and second difference. Critical values of the variables at their respective significance levels were at either 1% and/or 5% levels (with intercept, intercept and trend, as well as, without an intercept or trend inclusion in the individual series equation). This means the data can be used to accurately predict the econometric estimation that was suggested in Chapter Four of this study.

6.2.5 The Findings of the Cointegration Test

The results of the Johansen Cointegration tests conducted for the three hypotheses suggested that the econometrics time-series variables are cointegrated of the same order and a linear combination of them was stationary. This points to the existence of a long-term relationship among the variables which rules out any possibilities of a spurious relationship between them and also suggests that a causal relationship exist in at least one direction.

The test of Johansen cointegration conducted suggests that the null hypothesis of no cointegration was rejected, since p-value is less than 5%. When the Unrestricted Cointegration Rank Test (Trace) method was used to test the econometrics equation, the result suggested that there is statistical evidence to suggest three cointegration equations at 0.05 level. Likewise, the Unrestricted Cointegration Rank Test (Maximum Eigenvalue) also buttressed the statistical significance of the test, as it alludes to the dominance of the presence of cointegration among the variables tested in at least two cointegrating equations at the 0.05% level. Conclusively, the test results presented shows that all the econometric variables are cointegrated; in other words, there was a long run relationship or associationhip between them, and that the econometric variables of this study moved together in at least one direction.
6.2.6 The Findings of the Regression Analysis

For hypothesis 1: The finding of the regression analysis showed that there is a positive relationship between South African MNCs’ contribution to the economic growth in South Africa, and the Gross Domestic Product (GDP) of South Africa. The regression analysis also displayed that there is a positive relationship between the GDP of South Africa, and the level of infrastructure development.

For hypothesis 2: The finding of the regression analysis showed that there is a positive relationship between the cumulative GDP of the SADC, and South African MNCs’ contribution to regional economic growth and investment in the SADC, as well as, the degree of economic freedom/competitiveness in the SADC.

For hypothesis 3: The finding of the regression analysis revealed that there is a positive relationship between the regulatory environments of SADC countries, as they significantly affect the value of the SADC’s GDP contribution, and the value created by South African MNCs as a result of the targets set by the regulatory authorities in the SADC, as well as, the Foreign Direct Investment (FDI), net inflows (BoP at current US $) in the SADC and the degree of economic freedom/competitiveness. The findings of the regression analysis also showed that an increase in the regulatory environment of SADC countries (such as an increase in the tax levels) would significantly hinder the operations of South African MNCs within the region, as well as, reduce their FDI contribution to the SADC’s GDP.

This means that the rising levels of revenue accruing from the operation of South African MNCs results in higher GDP figures both nationally and within the SADC. This ultimately leads to a higher regional per capita income that also translates into higher employment figures. By implication, South African MNCs’ activities lead to sustainable economic growth in the SADC.

6.2.7 The Findings of the Pairwise Granger Causality Tests

For Hypothesis 1: The pairwise Granger causality for all combinations of the dependent and independent variables showed that the value of South African MNCs contribution to South Africa’s economic growth causes the GDP of South Africa to either rise or fall over a lag length of 3, just as the value of the GDP of South Africa causes South African MNCs contribution to South Africa’s economic development to either rise or fall over a lag length of 3. This indicates a bi-directional causality between the two variables.

For Hypothesis 2: The pairwise Granger causality for all combinations of the dependent and independent variables showed that the cumulative GDP of the SADC causes the level of FDI, net inflows (BoP at current US $) to either rise or fall over a lag length of 2, just as the value of South African MNCs contribution to regional economic growth and investment in the SADC causes the cumulative GDP of the SADC to either rise or fall over a lag length of 2. This indicates a uni-directional causality between the two econometric variable expressions that exhibit causality.

For Hypothesis 3: The pairwise Granger causality for all combinations of the dependent and independent variables showed that the regulatory environment of SADC countries causes the level of FDI, net inflows (BoP at current US $) in the
SADC to either rise or fall over a lag length of 2. Just as the value created by South African MNCs as a result of the targets set by the regulatory authorities in the SADC causes the regulatory environment of SADC countries to either rise or fall over a lag length of 2. Likewise, it was observed that the value of the Rand causes the regulatory environment of SADC countries to change over a lag length of 2. Similarly, it was observed that the tax payment rate of the SADC could cause the regulatory environment of SADC countries to change within 2 lag periods. This indicates a uni-directional causality between the four econometric variable expressions that exhibit causality.

6.2.8 Implication

If the prevailing expansion and growth of South African MNCs continues in the SADC, the economy of the SADC would become more integrated. This signifies compliance with the SADC Regional Indicative Strategic Development Plan (RISDP) 15-year long-term strategy blueprint that would eventually lead to a sustainable accession into a single currency zone by 2018. The World Economic Forum Global Competitiveness Report 2013 to 2014 rated South Africa 53rd out of 144 countries, while the SADC jointly ranked 104th out of 144 countries. However, due to the implementation of the RISDP, it is expected that high growth rate in South Africa triggered by South Africa’s MNCs enhances firm, country and regional specific advantages that ultimately transforms the SADC. Conclusively, by implication South African MNCs ability to attract FDIs helps to free funds for government, since it leads to a reduction in state involvement in businesses, increase investments in regional infrastructure, and aid the development of innovative and sophisticated businesses.

6.3 Overall Summary

The study has come to the conclusion that countries support the notion that MNCs’ activities and international trade is largely beneficial to them and if practised, they can draw the same conclusion on South African MNCs that are operating in the SADC. Moreover, the study concludes that globalisation is unavoidable, and given the specialised competencies that MNCs possess; they become repositories of much of the technology and management skills that both the manufacturing and service sectors require to push South Africa and the SADC towards sustainable growth and development.

Findings from the empirical study confirm those of previous research, relating to the strategic importance of regional economic integration to South African multinational companies (MNCs) operating within the SADC, as revealed in the literature study. It was established that the organisational strategies of South African MNCs influenced the entry strategies of competing international firms. While it was observed that the banking and financial services industry preferred privatisation, partnership and direct acquisition, the manufacturing sector preferred privatisation, partnership and export. Likewise, the retail industry used Greenfield investment to penetrate the SADC markets, while the hospitality and construction industry used joint ventures to penetrate regional markets.

It was clearly established that South Africa’s MNCs contribute to the growth and investment levels of both South Africa and the SADC. And that, to a great extent, the regulatory environment of SADC countries hinder the operation of South African MNCs within the region, as it creates many challenges such as entry and exit.
barriers for these firms. This study therefore fills the empirical void in the extant body of literature, as it critically evaluated and measured the impact that regional economic integration has on the revenue, as well as, the value of South African MNCs that operate within the SADC region. This dissertation thus achieved its research objectives and answered the research questions that were stated in the introductory part of this study. In summary, the study’s finding is that regional economic integration is seen to be vital for South African MNCs to be successful in their operations in the SADC.

6.4 Recommendations

Having found out that international trade and foreign investment expand markets, facilitate competition and disseminate knowledge by creating opportunities for growth and human development, it becomes necessary to pursue such a strategy globally. It is therefore, imperative that the regional agenda of the SADC ought to be pursued aggressively by government through practical measures like granting incentives and tax holidays to companies that trade within the SADC region. This is because, as observed in earlier studies, regional integration raises trade, productivity and increases exposure to new technologies, which spur growth both for the country and the countries where multinational companies who benefit from such state measures operate in.

It is therefore suggested that a well-focused policy intervention is required to help improve the perception of South Africa as an attractive destination for the inflow of FDI which acts as a landing spot for investments for the rest of the SADC zone. Furthermore, a sound higher education, together with a viable health sector is expected to trigger greater productivity. South African MNCs are expected to explore the factor-driven economies of SADC countries, by leveraging from an efficiency-driven local economy that is technologically ready to promote labour-intensive and export-driven industrialisation. This way, many unemployed citizens are absorbed into the productive sectors of the economy were they would channel their positive energies to the growth and development of the region. This ultimately helps attain the goal of reducing inequality and poverty by 50 per cent.

Since the majority of South Africans and the SADC population live in poverty, most South African MNCs operate at the bottom of the pyramid market, as well as, underdeveloped markets. Consequently, it is essential that these companies provide cheap and affordable goods and services to the general populace, in order to address social problems such as poverty and provide jobs that can help redistribute income and wealth in the region. Furthermore, government’s redistribution efforts need to be galvanised and directed to the needy constituencies, so that consumption and demand levels can be boosted with the sole aim of aiding further production.

It was discovered that regional integration presents new challenges for national policy makers. Hence it becomes imperative that national policies on MNC operation; stock exchange and regional market penetration are well coordinated and articulated. The need for a coordinated policy approach attains greater importance with the emergence of an integrated international production system; as investment and trade flows are the means of support of such systems.
It is anticipated that when these policies are formulated and implemented coherently, national trade and FDI policies would become mutually reinforcing in support of both national and regional economic growth and development. The figure below shows that for the period between 2000 and 2011 the Johannesburg Stock Exchange (JSE) market capitalisation was on average 79 per cent more than South Africa’s GDP and 18 per cent more than the SADC’s GDP. Also, the JSE’s group revenue comprised more than 1/3 of South Africa’s GDP, as well as approximately 1/4 of the SADC’s GDP. Also, South Africa’s GDP constituted about 44 per cent of the JSE market capitalisation and the SADC’s GDP was about 15 per cent of the JSE market capitalisation. A further investigation indicated that South Africa’s steady recovery from the pre-crisis growth rates had to do with the close ties between the nation’s economy anchored by South African MNCs’ connection to advanced economies that are currently experiencing economic recession. According to Borkum (2012) the JSE needs to grow in a manner that builds long-term resilience and relevance in the context of an increasingly competitive world.

Figure 6.1: A comparison of the JSE Market Cap, JSE Group Revenue and South Africa’s GDP from 2000-2011 in Trillion Rands (Source: Johannesburg Stock Exchange, Reserve Bank of South Africa)

An analysis of Figure 6.1 reveals that the most significant transformation in the comparative data occurred in 2010 as the JSE group revenue increased by more than seven per cent, closing at a staggering 47 per cent of South Africa’s GDP and 31 per cent of the SADC’s combined GDP. The implication of the growing dominance of the bourse is that the economy is exposed to the dynamic influence of foreign markets. This means that if there is a financial crisis it would definitely affect South Africa. Nevertheless, with the current potency of the auditing and reporting standards in the country, the gains of globalisation outweigh its downside. Another key find of this research shows that increased openness and financial development
attract FDI which is the lifeblood of MNCs, while depreciation in the exchange rate discourages both FDI into South Africa and from South Africa into the SADC. However, by implication, an integrated SADC leads to stability which is essential for viable job based growth and development.

The highlights of the 2012 index of economic freedom shows that South Africa was among the mostly free countries in world, as the country was placed 70th on the ranking. A further analysis of the index confirmed that there was a positive relationship between economic freedom and prosperity. Consequently, there is an assurance that South Africa benefits from further integration of the SADC, as economic freedom propels entrepreneurial dynamism, which leads to economic growth. At the moment, the SADC’s share of world GDP is 0.09 per cent, and is expected to increase geometrically if the SADC becomes profoundly integrated.

6.5 Conclusion

The most significant conclusion drawn from this research is that the strategic importance of regional economic integration to South African multinational companies (MNCs) operating within the SADC is substantial. More so, an effective regional development strategy can easily be facilitated through dynamic public-private partnerships (PPPs) that aid the construction of viable social amenities, as well as sustainable infrastructure. As Zybrands (2006: 155) has pointed out, outsourcing (or the contracting out) of appropriate services to the private sector is sometimes a solution to overcome the lack of funds or capacity of regional governments. This way government ministries, departments and agencies (MDAs) share the benefits by utilising new technology expertise, diversifying risks and, improving both national and regional operational efficiency when the engage in international trade.

Despite the fact that the Department of Trade and Industry (DTI) has helped to create an environment conducive for economic growth and expansion to thrive, there is indeed a great need for Regional Surveillance Teams to be set up, in order to monitor global trends and country specific indices that affect trade, as South Africa gears up for total integration into the whole SADC. This way, when South Africa eventually becomes an anchor currency of the SADC, the nation would be able to benefit maximally from increased exports to these markets.

Although a number of multinational companies pulled out of South Africa at the beginning of the democratisation process, the policy implication of economic programmes such as BEE, GEAR, AGISA and BBBEE has been largely successful. This has consequently triggered the renaissance of South Africa in the global arena. Strong multinational company performance in South Africa eventually translates into strategic growth and development for both South Africa and the SADC in general. This way businesses and all SADC member states benefit from both value and volume growth.

There is therefore a need for company activities and operations to depend on a more profound sensitivity and respect for the long-term economic, social and environmental needs of present and future generations. These can be achieved by building high-value human capital, and by creating as well as maintaining a knowledge-driven entrepreneurial culture within the context of South Africa’s complex demographics, globalisation and continuous improvement initiatives (World
Economic Forum, 2009; Henard, Diamond and Roseveare. 2012). This lofty objective can only be achieved by appreciating the fact that the future stability of the SADC is dependent, inter alia, on historically disadvantaged South Africans participating on a widely representative basis through MNCs in their own economy.

This study will not be complete without stating the factors that impeded its progress. The major limitation of most empirical studies is related to data boundaries. Although this study used annual data for comparison, it was not immune to distortions in gathering such secondary data. Although it was desired to carry out this research on a large scale, due to the constraints of cash and time, this study was vigorously pursued using standard metrics and variables, which ensured that a reliable and valid conclusion was reached.

It is therefore suggested that substantial resources be allocated for research of this magnitude (so that it can cover both travel and collation costs). This certainly (all things being equal) ensures a higher level of accuracy and precision. Nevertheless, due to the meticulous and judicious use of resources allocated for this study, the outcomes of this research can be instantly adapted to both industry and government.

Furthermore, new studies envisage that emerging markets have decoupled from advanced economies; this creates a fundamental void in the extant body of international business literature. However, since decoupling is considered to be a myth, as business cycle synchronicity between emerging markets (with high growth rates) and advanced economies (with a stable low growth rate) have generally not declined in recent years (Walti, 2009). It is recommended that new research (i.e. in this context) study the phenomenon of creative destruction, economic destruction and economic growth jointly in order to ascertain their impact in the global business arena.
Bibliography


Indianapolis: Dog Ear Publishing.


Bekkali, Z. 2012. Opinion: Africa offers huge consumer market potential. Assessed on 2014-07-04 from [http://www.ft.com/intl/cms/s/2/3a80fb84-177e-11e2-8cbe-00144feabdc0.html#axzz36S3kaie2](http://www.ft.com/intl/cms/s/2/3a80fb84-177e-11e2-8cbe-00144feabdc0.html#axzz36S3kaie2)


ECDPM. 2014. Advancing Regional Integration in Southern Africa: An evidence-based,


Heinecke, P. 2011. Success Factors of Regional Strategies for Multinational Corporations:


Makochekanwa, A. and Chiwenga, E. F. 2013. Impact of post crisis foreign trade policy on


Maryland: Frontline Publishers.


OECD. 2012. Policy Priorities for International Trade and Jobs. A Product of the


231–240.


India Publications.


Silva, M.R.P.P. 2007. From Dynamism to Dormancy: the Jewellery Industry in


Sofka, W., Shehu, E. and Faria, P. 2010. A Resource Dependence Perspective on MNC


The Committee of Central Bank Governors. 2013. SADC Financial Systems: Structures,


New York: USA.


China.


Wolf, M. 2009. Private behaviour will shape our path to fiscal stability. The Financial


APPENDIX

Graph 1: First Difference Line and Pie Graph for Hypothesis 1
Graph 2: First Difference Line and Pie Graph for Hypothesis 2
Graph 3: First Difference Line and Pie Graph for Hypothesis 3
Table 1: The SADC Key Ranking data

<table>
<thead>
<tr>
<th>Ranking (Data is for 144 countries)</th>
<th>Angola</th>
<th>Botswana</th>
<th>DR Congo</th>
<th>Lesotho</th>
<th>Malawi</th>
<th>Mauritius</th>
<th>Mozambique</th>
<th>Namibia</th>
<th>Seychelles</th>
<th>Swaziland</th>
<th>Tanzania</th>
<th>Zambia</th>
<th>Zimbabwe</th>
<th>South Africa</th>
<th>Total</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCI Index</td>
<td>142</td>
<td>74</td>
<td>N/A</td>
<td>123</td>
<td>136</td>
<td>45</td>
<td>137</td>
<td>90</td>
<td>80</td>
<td>124</td>
<td>125</td>
<td>93</td>
<td>131</td>
<td>53</td>
<td>1353</td>
<td>104</td>
</tr>
<tr>
<td>GDP</td>
<td>60</td>
<td>104</td>
<td>N/A</td>
<td>143</td>
<td>136</td>
<td>115</td>
<td>109</td>
<td>114</td>
<td>147</td>
<td>140</td>
<td>89</td>
<td>100</td>
<td>123</td>
<td>29</td>
<td>1409</td>
<td>108</td>
</tr>
<tr>
<td>GDP per capita</td>
<td>78</td>
<td>66</td>
<td>N/A</td>
<td>120</td>
<td>148</td>
<td>67</td>
<td>135</td>
<td>80</td>
<td>59</td>
<td>100</td>
<td>140</td>
<td>116</td>
<td>133</td>
<td>71</td>
<td>1313</td>
<td>101</td>
</tr>
<tr>
<td>GDP as a share of world GDP</td>
<td>63</td>
<td>99</td>
<td>N/A</td>
<td>143</td>
<td>125</td>
<td>117</td>
<td>102</td>
<td>121</td>
<td>137</td>
<td>145</td>
<td>78</td>
<td>110</td>
<td>134</td>
<td>25</td>
<td>1399</td>
<td>108</td>
</tr>
<tr>
<td>GDP as a share of world GDP as a percentage</td>
<td>0.15</td>
<td>0.04</td>
<td>N/A</td>
<td>0.01</td>
<td>0.02</td>
<td>0.02</td>
<td>0.03</td>
<td>0.02</td>
<td>0.01</td>
<td>0</td>
<td>0.09</td>
<td>0.03</td>
<td>0.01</td>
<td>0.7</td>
<td>1.13</td>
<td>0.09</td>
</tr>
<tr>
<td>Ease of doing Business ranking (185 countries)</td>
<td>172</td>
<td>59</td>
<td>181</td>
<td>136</td>
<td>157</td>
<td>19</td>
<td>146</td>
<td>87</td>
<td>74</td>
<td>123</td>
<td>134</td>
<td>94</td>
<td>173</td>
<td>39</td>
<td>1594</td>
<td>114</td>
</tr>
<tr>
<td>Total population in millions (2012)</td>
<td>19.6</td>
<td>2</td>
<td>N/A</td>
<td>2.2</td>
<td>15.4</td>
<td>1.3</td>
<td>23.9</td>
<td>2.3</td>
<td>0.1</td>
<td>1.1</td>
<td>46.2</td>
<td>13.5</td>
<td>12.8</td>
<td>50.6</td>
<td>191</td>
<td>15</td>
</tr>
<tr>
<td>Total population share of the world vs country (2012)</td>
<td>52</td>
<td>127</td>
<td>N/A</td>
<td>123</td>
<td>58</td>
<td>134</td>
<td>44</td>
<td>122</td>
<td>148</td>
<td>137</td>
<td>27</td>
<td>62</td>
<td>64</td>
<td>23</td>
<td>1121</td>
<td>86</td>
</tr>
</tbody>
</table>