MCom

Foreign Direct Investment, Economic Growth and Employment creation: A Causality Analysis from Namibia

A Dissertation

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By

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Plagiarism Declaration

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Abstract

The research explored the long-term relationship between FDI, GDP and host country employment by using sector-wise panel data from 1991 to 2017 in Namibia. The study applied unit root testing and Cointegration test to test for the presence of a cointegration relationship between the variables. Also, a vector autoregression model short-run causality among the variables was examined. In the end, Impulse response functions are estimated. The research found both a short term and long-term causality going from FDI inflow to employment. Impulse responses show that both GDP and employment respond positively to an exogenous shock in FDI inflow. However, the employment response to FDI inflow shock is smaller than that of GDP response. The paper also concludes that FDI has no causal effects on economic growth in Namibia. It means that economic growth is not contributed by the FDI significantly the results in this research have some significant policy implications. Therefore, as the results suggest that the FDI inflow has a positive impact on employment, because of the results, the researcher also recommends that Namibia pursue the policy of attracting foreign firms aggressively and create all the conditions required for attracting foreign direct investment in order to create further employment opportunities.

Table of Contents

Plagiarism Declaration ii
Abstract iii
Table of Contents iv
List of Figures vi
List of Tables vi
Glossary of Terms vii
Acknowledgements viii
Chapter One 1
1.1 Background of the study 1
1.2 Problem definition 3
1.3 Statement of research objectives 4
1.4 Research Questions 4
1.6 Scope of the Study 5
1.7 Justification of the Study 6
1.8 Organization of the Study 6
Chapter Two: 8
Literature Review 8
2.1 Introduction 8
2.2 Definitions of FDI 8
2.3 Theories of FDI 9
2.3.1 Industrial Organisation Theory 10
2.3.2 The Theory of Exchange Rates on Imperfect Capital Markets 10
2.3.3 Transaction Cost or Internalisation Theory of FDI 11
2.4.2 Types of FDI 12
2.4.2.1 FDI in Natural Resources 12
2.4.2.2 FDI in Infrastructure 13
2.4.2.3. FDI in Non-extractive and Non-infrastructure Sectors 14
2.4.2.4 Expected Outcomes of FDI 15
2.4.2.5 Economic Growth 15
2.4.2.6 Easy International Trade 16
2.4.2.7 Employment Opportunities 17

2.4.2.8 Development of Human Capital Resources 17
2.5 Empirical Studies on FDI Relationships 18
Chapter 3 20
Research Methodology 20
3.1 Introduction 20
3.2 Research Approach and Design 20
3.2.1 Data Source and period 21
3.2.2 The Specification of the Model 21
3.21 Definition and Measurement of Variables 22
3.2.4 Estimation Approach 23
3.2.4.1 Unit root tests 23
3.2.4.2 Vector Error Correction Model Co-Integration Analysis and Causality analysis. 24
Chapter 4: 28
Results, Discussion and Interpretation of Findings 28
4.1 Introduction 28
4.2.2 Descriptive Summary 28
4.2.4 Diagnostic Tests 30
4.2.5 Pre-estimation Lag Selection 35
4.2.6 Johansen Co-integration Test 32
4.2.7 Post estimation Lag selection 36
4.2.8 Granger Causality Test 32
4.2.9 Stability Test 37
4.3 VAR Model Estimation 38
4.4 Impulse Response Analysis 40
4.5.1 Heterostadicity and homodastadicity 31
4.6 Summary 42
Chapter 5 43
Conclusions and Recommendations 43
5.1 Introduction 43
5.2 Summary and Conclusions 43
5.3 Policy Recommendations 45
Appendix 1: World Bank Data Definition and Sources 52

List of Figures

Figure 3: Post-estimation Lag Selection .....**Error! Bookmark not defined.**
Figure 4: FDI_in – GDP Causality Summary 34
Figure 5: FDI_in – Unemployment Causality Summary 35
Figure 6: LM Test for Autocorrelation 37
Figure 7: Results of VAR in STATA 38
Figure 8: Impulse Response for Economic Growth 41
Figure 9: Impulse Response for Job creation factors 42

List of Tables

Table 1: Transparency in Namibia 2
Table 2: Definition of the main parameters of study 5
Table 5: Descriptive Summary 28
Table 6: Augmented-Dick Fuller (ADF) Unit Root Tests 29
Table 7: Results for Lag Length Selection 36
Table 8: Granger Causality Wald Test Summary .....**Error! Bookmark not defined.**
Table 9: Results for Significant VAR Equation 39
..... 42

Glossary of Terms

Acronym	Meaning
ADF	Augmented Dickey-Fuller
CEE	Central and East European
EG	Economic Growth
EU	European Union
FDI	Foreign Direct Investment
FIA	Foreign Investment Act
GDP	Gross Domestic Product
GRN	Government of the Republic of Namibia
ICSID	International Centre for the Settlement of Investment Disputes
ILO	International Labour Organisation
IMF	International Monetary Fund
MNCs	Multinational Corporations
NIPA	Namibia Investment Promotion Act
OPIC	Overseas Private Investment Corporation
OPM	Office of the Prime Minister
PWC	Price Waterhouse Coopers
SLEMP	Self-Employment
SME	Small to Medium Enterprises
SPSS	Statistical Package for Social Sciences
UNCITRAL	United National Centre for International Trade Law
UNCTAD	United Nations Conference on Trade and Development
UNEMP	Unemployment
VAR	Vector Auto Regression
VUEMP	Vulnerable Employment

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Chapter One
Introduction

1.1 Background of the study

The greatest economy in the world, the United States of America was built by immigrants from many different nations of the world, each unique contributing set of skills and resources from their native countries. The result is the first state with diversity in its people as well as in the products and services that has to offer. Most emerging economies suffer from a deficiency of skills and resources that are not native to their countries. As a result, the only way for them is the breakthrough developmental ceiling they have reached as an injection of new skills and ideas from other economies that have surpassed their current level. This requires businesses that have operated successfully in developing countries coming to establish their operations in a developing country, bringing in the skills and resources that have made them successful in their home country. The investor does not purchase shares in existing businesses, but they come to establish business models that have been tried successfully in other economies, and they manage the operation themselves.

Some of the benefits of Foreign Direct Investment include the introduction of new technologies and technical know-how, increased productivity through better production management techniques, the impartation of skills to the local labour force, increased remuneration, and generation of upstream and downstream business opportunities for local firms (The World Bank, 2017). Some Foreign Direct Investment has come on the invitation of host states through their international trade representatives while some FDI was imposed as a condition for access to loans from international institutions such as the World Bank. Foreign Direct Investment has been hailed as a catalyst for economic development and job creation in developing countries. Consequently, there have been efforts by developing regions to lure investments into their countries and regional economic blocks (The World Bank, 2017).

This study was initiated with the primary objective of determining the impact of Foreign Direct Investment (FDI) on economic growth and job creation in Namibia. At independence in 1990, Namibia introduced the Foreign Investment Act (FIA) (Act No.27 of 1990) which explicitly

aimed to promote, attract, encourage and facilitate FDI inflows. Over the years, the state realised that the FIA Act had shortcomings in terms of attracting FDI, as well as concerning the stimulation of local investment. Thus, in 2016 they introduced the Namibia Investment Promotion Act (NIPA) (Act 9 of 2016), which was meant to provide for the promotion of sustainable economic development and growth through the mobilisation and attraction of foreign and domestic investment (OPM, 2016).

However, enforcement of NIPA was halted due to plethoric legal drafting issues, mainly related to conflicting clauses with its numerous bilateral agreements with its major trading partners in the European Union (EU). The revised Namibia Investment Promotion Act of 2016 is currently in its draft form and will soon enter the legal drafting process and is expected to be promulgated in 2019. Namibia boasts of natural resources, namely copper, zinc, oil, diamonds and uranium, which attracts the most FDI in the country. The FDI comes mainly from Germany, South Africa, the United States and the United Kingdom. Since 2016, there has been a noticeable drop in FDI inflows, as the investors are cautiously waiting for the passing of NIPA.

The Namibian government's neo-liberal economic policies have over the years tried to promote business partnerships between local and foreign investments with tax holidays and protectionism, hoping that local people can gain the skills to run and manage businesses. This is evident from Table 1, which shows that on average, the Namibian policies compare well with those of other nations both in the developing and developed world.

Table 1: Transparency in Namibia

	Namibia	**Sub-Sahara Africa**	**United States**	**Germany**
Index of Transaction Transparency	5	5	7	5
Index of Manager's Responsibility	5	4	9	5
Index of Shareholders' Power	5	5	4	8
Index of Investor Protection	5.5	4.3	6.5	6

Source: PWC, 2016

However, since 2014 there have been calls to reserve some sectors of the economy exclusively for locally owned businesses. These included local commuter taxis, beauty salons, barbershops and general retail shops. An investment ACT was deemed to hurt the country's FDI attractiveness, as the investors just do not come but usually have a set of conditions, they need to be met by the host country before they invest in the local economy. While these conditions

may vary depending on the investors' interest, the investors generally expect the places of their investments to be places of political stability and be practising internationally accepted standards in politics and governance (Alesina et al.,2017).

A crucial determinant of economic development in general and FDI. As noted in the case of Zimbabwe, the onset of political instability was immediately followed by the isolation of the country in World economics, starting with the western economies followed by the rest of the world. China, its long-term political ally, also became reluctant to invest in the country as much as they did before (Ward, 2015). The political instability had the potential to degenerate into a civil war, and hence investors weighed the risk of losing their investment in the event of war (Ward, 2015).

Economies that successfully attract FDI have governments that actively engage potential investors directly or through their governments (Tembe, 2016). FDI destinations are exposed to potential investors through their membership to international associations such as the Commonwealth as well as being signatories to international trade agreements. Sometimes foreign missions have an Investment Promotion Office that engages potential investors in the country where the embassy is based. Political visits by state presidents are also manipulated as trade representatives join the delegation and meet with the business community as the political delegation meets with the host government. While the study investigated the case of Foreign Direct Investment in Namibia, it also contributes to the existing literature on the impact of FDI on economic growth and employment creation.

1.2 Statement of the Problem

On attaining political independence, most developing countries have welcomed investment in any shape and establish their countries as investor-friendly destinations. In return for investment, the host governments offered incentives in the form of tax concessions and relaxation of labour laws, including minimum wage laws governing local businesses. As a result, some investors brought in workers from their home country to perform general tasks that could have generated employment for locals. In other cases, the locals who were employed were underpaid or mistreated. Such investors also repatriated profits to their home countries, leaving the host country as a source of cheap labour and free amenities (Kambonde & Ravinder,

2017). Most of the jobs created by FDI in the manufacturing sector do not impart skills that help the country after the investor has departed. Further, foreign investors have created an environment where local small businesses cannot compete (Kambonde & Ravinder, 2017).
Foreign direct investment has been regarded as one of the crucial factors that stimulate economic growth and employment in most of the developed states. However, fewer research has explored this issue in the case of developing states. This study examines the interaction among foreign direct investment, economic growth and employment in Namibia. At present, the economic growth and employment are the most troublesome problems which are needed to be solved in Namibia (Thwaites, 2018). The question of whether there is a correlation between foreign direct investment and job creation is a significant and exciting challenge for developmental economists. This study used Namibia as a case in point, to investigate this relationship and draw conclusions based on historical data on FDI, GDP and Unemployment for the period 1991 to 2017.

1.3 Statement of research objectives

The purpose of this discourse was to examine the role and impact of foreign direct investment on economic growth and job creation in Namibia. The specific objectives forming the basis of this research were to:

- Determine the causal relationship between foreign direct investment (FDI) inflows, economic growth and employment in Namibia?
- Identify specific sectors that have recorded job creation and contributed to economic growth as a direct result of FDI since 1990?
- To determine the relationship between causality and impulse response function for job creation and economic growth

1.4 Research Questions

The discourse sought to answer the following questions:

1. What is the causal relationship between foreign direct investment (FDI) inflows, economic growth and employment in Namibia?

2. What sector if any, has recorded measurable or verifiable employment creation that can be directly linked to Foreign Direct Investment.
3. What is the relationship between causality and impulse response function of economic growth and job creation?

1.6 Scope of the Study

The study focused on three main areas namely, the amount of Foreign Direct Investment that came into Namibia between 1991 and 2017, the country's GDP and the rate of unemployment as a percentage of the total labour force during the same period. While investments by local firms also influence economic development and employment creation, the study only focussed on Foreign Direct Investment.

Table 2: Definition of the main parameters of the study

Parameter Name	Definition
Foreign Direct Investment, Net Inflows	Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 per cent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars.
GDP Current	GDP at purchaser's prices is the total of gross value added by all resident producers in the economy plus any product taxes and minus any appropriations not encapsulated in the value of the products. It is computed without making inferences for depreciation of fabricated assets or depletion and degradation of natural resources. Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.
FDI Stock	Foreign Direct Investment (FDI) stocks measure the total level of direct investment at a given point in time
Unemployment as % of the total labour force.	Unemployment refers to the share of the labour force that is without work but available for and seeking employment.

1.7 Justification of the Study

African countries have attracted investors immediately after attaining political independence. Many years later, the level of economic development and the rate of unemployment does not seem to correspond with the billions of dollars of Foreign Direct Investment that the country boasts of having attracted. The question arises of whether FDIs have, the same effects and benefits that are disposed on paper.

The discourse of FDI was significant to the researcher who is an employee of the State of Namibia, in the Ministry of Industrialisation, Trade and SME Development. He is part of the International Trade Directorate, under which trade, trade agreements and trade policy fall. Being also a scholar in the field of business management, the researcher would want to compare the theories learnt to their application in the business world. As a Development Finance student, the researcher has had questions and doubts about FDI benefits to the host country. These developed a desire to explore and study the topic. Policymakers in Namibia and potential investors in Namibia will benefit from any new information and questions that this research will generate. This study would also bring much-needed information in the academic world. The academic sector, particularly in Namibia, needs more research studies in different fields to add to the already existing body of knowledge. This research has added to existing knowledge and provoked questions for future researchers.

1.8 Organization of the Study

Chapter 1: Introduction – This chapter introduces the study by presenting a background to the problem being researched, making a problem statement that clearly defines the problem. It further states the aims and objectives of the study. For each objective, research questions are formulated that help us achieve the objective. The significance of the study is also deliberated, as well as the format of the whole thesis. The chapter starts with an introduction and ends with a conclusion.

Chapter 2: Literature review

This chapter discusses the theoretical and empirical literature on the Role and Impact of Foreign Direct Investment on Economic Growth and Job Creation in Namibia. The links between theoretical and empirical literature are discussed and the relationships among the variables explained. The chapter includes a theoretical framework of the associations between the study variables. A summary of the literature will highlight the literature gaps and study propositions.

Chapter 3: Research methodology

This chapter describes and discusses the research design and methodology that was followed to answer the research question in this study. The chapter will also discuss the context using multiple sources of data to be used.

Chapter 4: Findings

The study findings concerning the aim and objectives of the study area discussed in Chapter 4. The segment also discusses the steps of data processing and analysis, leading to the findings. The section also provides a discussion of the findings of previous research.

Chapter 5: Summary, conclusions and recommendations

The chapter gives a summary of the findings, a conclusion, as well as the limitations of this study. The chapter also discusses the contribution of the study to the body of knowledge.

Chapter Two:

Literature Review

2.1 Introduction

The study aimed to gain an understanding of the role and impact of Foreign Direct Investment on Economic Growth and Job Creation in Namibia. The literature review starts with the definitions and types of FDI. The chapter then discusses the theoretical and empirical literature on the expected outcomes of FDI towards establishing the relationships among the variables of interest. The chapter also presents a theoretical framework to show the linkage between the variables further.

2.2 Definitions of FDI

Foreign Direct Investment is an investment that involves a foreign-based firm opening a branch or subsidiary in a foreign country and relocating some management staff to run the operation. The investors organise, manage and run the business on a day to day basis. It is different from other investments in which the investors buy shares in a local business but do not have operational control. FDI is delineated by the International Monetary Fund (IMF) (2017), as an investment involving a long-term relationship and reflecting a lasting interest and control by a resident company in the host economy. FDI is also regarded as the ownership or control of 10 per cent or more of a company's voting security or the equivalent interest in an unincorporated business (Grittin & Pustay, 2015). Ownership means that the duration of the investment and the level of ownership qualifies an investment to be an FDI.

FDI is not only one-directional with a country receiving investment. While a country is receiving Foreign Direct Investment from other countries, some of its local businesses are also going to other countries as Foreign Direct Investors. The rules that are put in place to govern FDI by governments ought to be conducive to incoming FDI as well as outgoing FDI. Matjekana (2014) noted that FDI's are classified with regards to the direction which the money is flowing, namely the inward and outward. His definition of the two is that inward flow is the kind of investment when foreign capital is invested in local resources and the outward FDI as

when local capital is invested in foreign countries. Horizontal FDI in Multinational Corporations (MNC's) that have their headquarters in their home country and have production plants both at home and abroad producing the same products (Protsenko, 2014). In contrast, vertical FDI is the kind of investment in which MNC share a diverse phase of generation by having their headquarters in their home country and production plants in different foreign states (Protsenko, 2014).

In the broad sense, FDI includes the investment by an organisation from a developed nation into a developing nation (Gomtsyan, 2014). Of late there have been other investments from developing nations into other nations such as those from Southern African countries and the partnership between the Namibia government and the Zimbabwean partners to establish a bank in Namibia (Manyuchi, 2017). These types of investment might include mergers and acquisitions, setting up new business ventures or reinvesting the profits in new business ventures. In a narrower sense, FDI means building a new facility and maintain control of the business with at least 10% interest in the business that is outside the investor's home country (Ietto-Gillies, 2012).

FDI is hence the total of the short-term capital, equity capital and long-term capital as seen in the balance of payments (Dunning & Pitelis, 2013). FDI generally involves the transfer of technology, participation in management, expertise and joint ventures. FDI stock would then be represented by the difference between the inward FDI and the outward FDI, cumulative over a given period. FDI does not, however, include the acquisition of shares in a specific venture (Bhattacharyya & May 2013). The acquisition of shares is usually associated with passive ownership of a business venture; however, in the case of FDI, the investors are active participants in the business's day to day operations and management. Investors are supposed to transfer the skills and know-how to other people.

2.3 Theories of FDI

Some theories have been proposed to try and elucidate FDI and its impact.

2.3.1 Industrial Organisation Theory

As the concept of Foreign Direct Investment has developed over the years, several theories have been put forward to try and explain it. In the 1960 and 1970s, several suggestions led to the identification of the Industrial organisation theory proposed by Hymen (1976). Hymen argued that FDI was a result of companies that wanted to create a monopoly in an individual market, and hence they formed various companies in several countries that have the same line of work. This resulted in oligopolistic companies. Given this nature, these companies make it difficult for competitors to enter their market. They have an advantage over other corporates because they have advanced technology, significant economies of scale and expertise. This makes it almost incredible for local corporates to compete with them. This school of thought assert markets and certain investments need exceptional characteristics of corporates to venture in. However, local enterprises are limited in terms of the technology and skills needed in that regard.

Hence foreign firms invest in such specialised areas. The portfolio choice theory considers the element of uncertainty in connection with capital flows such that investors are assumed to consider not only rates of return but also risks associated with selecting a portfolio of foreign investment. The flaws of modern Organizational theory are a relatively young science in juxtaposition with the other scientific disciplines (Thwaites, 2018). The weakness of this theory is based on the observation that fluctuations in rates of return on capital within, and more so between countries are not perfectly correlated. Hence risks might be reduced by diversification of investment portfolios. This implies that the destination of new foreign capital is driven by the composition and location of the current investment portfolio held.

2.3.2 The Theory of Exchange Rates on Imperfect Capital Markets

Itagui (1981) and Cushman (1985) analysed the influence of uncertainty as a factor of FDI. This theory sought to explain how investors choose the places they invest in. This theory suggests that the investors use the strength of the host currency compared to their own to decide if they should invest. This theory suggests that investors choose to invest in places where the currency is more stable and more reliable. The robustness of this theory is that it highlights the effect of the exchange rate. The fundamental flaws of the theory are that states with weak currency exchange rates tend to have more FDI.

On the other hand, with few concessions, the macroeconomic values of saving-investment imbalances are still undeveloped in this discourse. They were discounting intertemporal disequilibrium institutes, a fundamental theoretical weakness because it is a logical inference in any theory based on the distinction between the market interest rate and the natural rate (Woodridge, 2019). Even though the theory found excellent support, the school of thought does not provide an elucidation for investment between two developed state that have currencies of equal strength (Achchuten, 2018).

2.3.3 Transaction Cost or Internalisation Theory of FDI

This theory was propounded by Buckley and Casson, in 1976 and then by Hennart, in 1982 and Casson, in 1983. The theory explains that FDI companies usually build their organisations in such a way that they have an inherent advantage over other companies that will see them grow their company around the world. However, in setting their companies, they face the transition risk, that is, they are treated differently to local companies by the government in addition to other challenges that come with not knowing the market well. The weakness of the Transaction Cost Theory is that recognition of disparities in internal corporate costs may also play a role in the decision to assimilate exposes an intrinsic flaw of the prevailing tests In a nutshell, Transaction cost theory does not furnish a tacit elucidation for variations in the costs of integration as it does for the costs of non-integration (Yousafzai, 2018). Without a school of thought of disparities in the costs of integration, it is problematic to know which determinants are accountable for market failures which are correlated with determinants responsible for corporate failure. One could simply ignore these issues and assume that the costs of integration are orthogonal to the proxies for the costs of non-integration (Brooks, 2018).

2.4 Theoretical Framework

2.4.1 FDI in Developing Countries

This rubric has adopted FDI in development countries theoretical framework the variables used are dependent variables of FDI, employment, Economic growth and independent variables of Namibia. The theories articulated above have mainly elucidated the mobility of investment from developed economies/regions to other economies/regions (Yousafzai, 2018). In more recent times, expressly during the past two decades, a plethora of developing states have

emerged on the map of international investors. Multinational Corporations have not only emerged from newly industrialized states such as the Republic of Korea and Taiwan Province of China but also states such as Argentina, Brazil, India, the Philippines, among others. Namibia is a middle-aged economy which is among the developing states. The so-called Third World MNCs (TWMNCs) have grounded themselves in every area of the global economy. Technology is more suitable for an area with significant market size, firms importing technology will export their products once local demand has been met (Marlow, 2013).
Dependent Variables

2.4.2 Types of FDI

2.4.2.1 FDI in Natural Resources

Traditionally, it was generally believed that having natural resources had a distinct advantage for a country. However, that is only true to the extent that foreign investors use natural resources in such an environmentally friendly way and employ good labour practices. In some places, natural resources have turned out to be a source of conflict as some wars have been started and prolonged to establish and maintain control of regions were diamonds or oil were found (Winegard, 2016).

The participation of foreign investors in the extraction of raw natural resources does not always guarantee returns to the host country in terms of the balance of payment and tax returns (Sachs & Warner, 2015). Given that natural resources are non-renewable, governments need to manage FDIs in a forward-looking way, with a plan that guarantees the sustainability of such resources for further generations.

Even when the natural resources are generating income, there is a danger of currency exchange rates being negatively affected. Overvalued currencies are usually as a result of policies put in place to protect the local currency, instead of allowing market forces to determine the exchange rates (Shatz & Tarr, 2016). There have been cases where for personal gain, individual government officials have corruptly authorised foreign direct investment without following due process. A notable case is in Nigeria, where foreign firms have invested in the oil industry by giving incentives to corrupt officials (Moran, 2016). Countries like Chile are examples of

nations that have effectively managed the use of income from natural resources, thereby benefiting many of their citizens (Moran, 2016).

Transparency is a prerequisite for a country to benefit from Foreign Direct Investment in its natural resources. In adopting the advice from the World Bank, the government of Chad established a nine-member committee made up of representatives from the government, private sector and civic organisations to monitor the activities of Foreign Investors (Moran, 2016). The committee worked on specific guidelines that ensured that 80% of the income was spent on sectors such as health and rural development. At least 5% of the profits were returned to the region from where the natural resources originated (Useem, 2012).

Non-governmental organisations have urged governments to ensure transparency by requesting the investors in the extractive sector to publicise all the taxes, and other legal fees they paid to the host government before they could be allowed to be listed on the major stock exchanges (Pardal, 2018). The British government has also taken the initiative to improve transparency in the extraction industry by setting rules and regulations for the FDI outward investments into the developing world (Pardal, 2018).

The G8 summit held in 2003 specified the need for investors in the extractive industry to be more transparent if the developing world is to eliminate corruption. If the use of natural resources is transparent, it allows the host governments, investors and home governments to negotiate the distribution of profits and ways to benefit the citizens while preventing investments into conflicts. This places responsibility and accountability on all players in the sector as there would be negative implications for companies that invest in countries where there are human rights abuses, or where natural resources fund unjust wars.

2.4.2.2 FDI in Infrastructure

One of the factors that attract Foreign Direct Investment into a country is the presence of excellent infrastructure. Host countries become more attractive to investors if they have reliable power supply, transport, clean water supply and sound telecommunication systems (Irwin, 2017). Governments, therefore, more readily accept Foreign Direct Investment that improves the country's infrastructure as these paves the way for investors in other sectors of the economy.

The main challenge facing FDI into infrastructure development is that most of the investments do not have a direct return, and hence the government usually bear the costs. The challenges faced by governments is that they sign the agreements which are valued in hard currencies while they budget in their local currencies. Changes in the exchange rates during the project could adversely affect the host government (Martin & Bracey, 2016). If the exchange rates change for the better, then the government benefits, but if they change for the worse, the government is faced with a budget deficit. When this happens, the unfortunate situation is viewed as a political act, not as a business deal gone wrong (Berry, 2013). To protect investors from their countries, the Asian and Latin American governments make it mandatory for the host governments to guarantee the exchange rate for payments made in foreign currencies.

An example of this is when Indonesia failed to pay a Mid-American corporation during an Asian Crisis, they were taken for arbitration, and the investor won. This led the Overseas Private Investment Corporation (OPIC) who act as the insurer, to making the most significant payment known in recent history and then they pursued the Indonesian government to recover their funds (Martin & Bracey, 2016). Such experiences lead to the question if the governments should take such risks or, should FDI in infrastructure development be constituted as a commercial or political risk. Such cases are heard by the International Centre for the Settlement of Investment Disputes (ICSID) and the United National Centre for International Trade Law (UNCITRAL) as dictated in most bilateral and multilateral agreements. Countries cannot appeal to the International Supreme Court in pleading the case of the citizens of the countries that would suffer when such payments are made. The court would focus on the terms of the contract, usually favouring the investor more than the plight of the citizens who, in the middle of a crisis, would need imported food and medical supplies.

2.4.2.3. FDI in Non-extractive and Non-infrastructure Sectors

FDI in the sectors of production, that is, manufacturing, processing, assembly, services, retail and agribusiness are usually considered risk free, a concept that might be misleading. The old thinking is that the investor in non-extractive and non-infrastructure sectors do not cause harm to the environment, and they are expected to treat the employees at international standards. Research has however shown that investors behave differently depending on whether their work is to cater to the export market or the local market (Ietto-Gillies, 2012). This is as a result of the

competition they face on international markets that usually looks at how they produce their products and the way they pay their taxes and treat employees. However, when they are dealing with local markets, they usually do not face stiff competition, and they hence do not feel obliged to respect some international laws.

A cost-benefit analysis conducted for over a decade on 83 projects in 30 developing nations by the FDI in non-extractive and non-infrastructure sectors valuing all inputs and outputs at world market prices, show a majority of the operations generating an increase in the host country's income (Encarnation & Wells, 2016). Despite the increased income, there was also an increase in what the host nations had to pay indirectly for the investment such as moral decay, poor working conditions for their people and the introduction of foreign cultures that people spent more of the money they do not have to buy things they do not need (Encarnation & Wells, 2016). With this outcome, it seems that the host nations would have been better off if they had not hosted the investors from the onset.

The standard that is used to differentiate a positive project and a negative project is the terms and conditions that bound the investor as imposed by the host country. The host government should stipulate their expectations on the investor and the consequences of not adhering to such (Bhattacharyya & May 2013). FDI that is not guided by any rules and regulations but give more emphasis on the incentive to the investor. The contracts between the host government and the investor should spell out all the expectations of the government from the investor, such as how the investor should enhance the country's welfare and practices they should refrain.

2.4.2.4 Expected Outcomes of FDI

2.4.2.5 Economic Growth

Economic growth is chiefly driven by improvements in productivity, also called economic efficiency. Increased productivity means the production of more goods and services with the same inputs of labour, capital, energy, and materials. For example, labour and land productivity in agriculture were increased during the green revolution. In economics, economic growth denotes the growth of potential output, production at full employment, which is motivated by the growth in aggregate demand or observed output (Almfraji et al., 2014). Almfraji, Almsafir

and Yao (2014) concluded that previous studies on the relationship between FDI and economic growth have primarily proved that FDI exerts positive effects on the host country's Economic Growth (EG). However, there have been some few cases where the results were negative or none existent. Their investigation also stated that adequate human capital, well developed financial markets and the open trade regimes play a decisive role in the FDI-EG relationship, while dependency on foreign investment and technical gap negatively contribute to the relationship.

2.4.2.6 Easy International Trade

Investors into developing countries are expected to come with a wealth of knowledge of international markets, and hence they are expected to strengthen international trade (Birkbeck & Botwright, 2015). This has however been a debate among academics as some claim that the assumption is not always valid.

The discussion of the relationship between FDI and international trade has been an ongoing one. Three approaches have been used to analyse the type of relationship that exists between FDI and trade; these depend on the level of trade. There are also three levels of trade, namely, the microeconomic or firm level, the macroeconomic or economy-wide level, and the sectoral or industry level (Xiao, 2014).

Since the 1980s, trade theories were suggested that tried to explain international trade and these were taken under the assumption that there is grander return scale, imperfect competition, and differentiated products (Helpman et al., 2014). These studies differentiated between the horizontal and vertical FDI. In this regard, horizontal FDI is defined as those that duplicate roughly the same activities in several countries, while the vertical FDI are those with investments in various stages of production in various countries (Glass, 2016). Horizontal and vertical FDI have a different impact on the economy.

In more recent studies, many scholars compared the relationship between the FDI and trade in line with firm-specific activities, plant-specific and horizontal based FDI. Based on, this Markusen & Venables (2017), argued that those countries who have a similar history or those with the relationship of the former coloniser and colonised usually keep a close relationship.

This means that there are factors that investors use to decide which country they would invest in, such as the historical relationship of the destination country to their home country.

2.4.2.7 Employment Opportunities

A study was executed to evaluate the effect of FDI on employment in Hungary (Fakezas, 2003). A sudden change in the political system that is from socialist to capitalist attracted a lot of FDI in a short period. The motivating factor was that there was very cheap and highly qualified labour. FDI was attracted to the ability to produce using cheaper labour.

In alternative discourse conducted in Mexico to assess if FDI was the answer to the country's pressing labour market problems. Nunnenkamp, Bremont, & Waldkirch (2007) drew data from about 200 manufacturing firms using both white and blue-collar workers. Findings were that in Mexico, there was a positive relationship between FDI and employment; this was found to apply to both the white and blue-collar jobs.

A similar study was conducted in Central and East European (CEE) Countries taking a specific look at Austria, but this specific study wanted to assess employee performance of direct FDI compared to the indirect FDI (Altzinger & Bellak, 1999 as cited in Rizvi & Nishat, 2013). The study found that the cost of labour mainly influenced FDI's ability to promote employment. In an environment where labour is cheap, FDI boasted employment while in the areas where labour is expansive, FDI did not improve employment. Direct FDI seemed to follow international standards in employment. However, in the case of indirect FDI, there was a tendency to follow national patterns of employment (Rizvi & Nishat, 2013).

2.4.2.8 Development of Human Capital Resources

It is one thing to provide employment and another to develop human capital. The development of human capital in the process of developing skills, empower employees so that they can deliver better (Radhakrishna & Raju, 2015). For the developing world, the ability to engage technologies depends primarily on the ability to attain development to a certain level (Michie, 2014). It means that there should be a certain level of power supply and ability in the people to use the technologies. That is the reason why any country needs to invest in the development of human capital. Upgrading human capital is essential for individual companies and the benefit of the whole nation. There are both direct and indirect benefits of developed human capital.

The direct effect is that when employees are empowered, they are more informed on their tasks and how to accomplish them effectively and hence productivity increases, and so does profitability. The indirect effect is that when employees are trained, they know how to improve their working environment. Another advantage is that when an organisation invests in the training of its employees, they develop a sense of belonging and they apply their best efforts as part of the organisation. Employees become more committed to the future of the organisation.

2.5 Empirical Studies on FDI Relationships

Masipa, (2014), attempted to empirically establish the relationship between foreign direct investment, economic growth and employment in South Africa, employing the unit root, integration and Granger causality test using a time series annual date from 1990 to 2013. His findings were that there is evidence of a long-run relationship between foreign direct investment, economic growth gauged by GDP growth and employment in South Africa. He suggested that due to its perceived importance on economic growth and employment creation, FDI should, therefore, be examined and extensive researches should be done in order to have a clear understanding of what its contribution to growth and employment is. His research on the impact of FDI on economic growth and employment in South Africa highlighted some possible factors which affect the flow of FDI into the host country. He argues that they are likely to determine the areas which foreign investments are likely to flow in, return on investment, cost of labour, availability of human capital, availability of natural resources, political instability, corruption, and market size.

Every firm planning to invest abroad will consider the return on investment as a determinant of their decisions. One area that foreign firms consider when investing in labour-intensive sectors is the cost of labour. Countries with low labour cost will have an advantage in attracting these kinds of FDI. Several studies have established a relationship between the flow of FDI and the availability of skills and human capital in the host country. For resource seeking FDIs, availability of resources is a significant consideration when deciding which state to invest in. Many researchers have indicated that political instability scares off potential investors in the host country. It is perhaps the primary reason why African countries attract fewer FDIs than other developing regions. The size of the market is also a significant factor when companies are considering investment destinations, especially if the products are to be sold in the country where they are produced.

Cristina Jude, Monica Loana Pop Silaghi, 2010, in their research paper about FDI impact on employment creation and economic growth in CEE countries have the following to say; FDI industry location plays a role on the potential impact on employment. If the FDI is in industries which are capital and technology-intensive with high value-added, the effect on employment level is expected to be insignificant. If the FDI replaces local firms that were using relatively labour-intensive techniques, the effect can be even negative (Dunning, 2008). If FDI is in labour-intensive sectors, the quantitative effect on employment can be positive and significant.

Their conclusion was, the potential for a positive contribution of FDI to employment and growth exists in Central and East European countries. The share that FDI has reached in local economies allows for a visible role in promoting growth. What policymakers need to do is to identify sectors with higher potential in employment and growth than direct FDI inflows toward these sectors.

Anne Krstevska and Magdalena Petrovska, (2012), made an empirical analysis that proved a positive contribution of FDI to productivity, mainly through the implementation of new technologies, the transfer of know-how, management skills and expertise. The findings indicated that FDI impact on employment was negative mainly due to the low level of Greenfield investments and non-attractiveness of the labour-intensive industry for foreign investors.

Chapter 3
Research Methodology

3.1 Introduction

This section unpacks the discussions of the research approach and design, data source and duration of the study. It further unravels the regression model, the choice of causality analysis, the deployment of the network diagram and finally presents the impulse response function.

3.2 Research Approach and Design

Research design can either be in the form of quantitative, qualitative or mixed methods. According to Saunders et al. (2016: 165), quantitative research can be differentiated from qualitative research by distinguishing between numeric data (numbers) and non-numeric data (words, images, video clips and other similar material). According to the Regent Research and Statistical Method guide (2016), quantitative research is when most data is numerical and can be statistically treated. Quantitative data is therefore often used as a synonym for any data collection technique (such as a questionnaire) of data analysis procedure (such as graphs or statistics) that generates or uses numerical data. On the other hand, qualitative is often used as a synonym for any data collection technique (such as an interview) or data analysis procedure (such as categorising data) that generates or uses non-numerical data. Although the explanation above helps to differentiate between the two methodological choices, it can be problematic and narrow. Many research designs are likely to combine quantitative and qualitative elements. For example, a research design may use a questionnaire, but it may be necessary to ask respondents to answer some open questions in their own words rather than ticking the appropriate box, or it may be necessary to conduct follow-up interviews to seek to explain findings from the questionnaire, in practice are often mixed.

This research study adopted a quantitative approach in establishing the causal relationship between FDI, GDP and employment in Namibia. It was based on historical data stored in databases of credible institutions such as the World Bank and the United Nations Conference on Trade and Development (UNCTAD).

3.2.1 Data Source and period

This study was based on the Namibian economy during the period 1991 to 2017. The study includes all the players in the economy as these have been captured in the annual statistics that include the country's Gross Domestic Product, Foreign Direct Investment flows as well as unemployment rate during the period in question. The study is inclusive of all the foreign investors that participated in the Namibian economy under the FDI umbrella from 1991 until 2017, whose activities were captured by the World Bank and United Nations data sources that were used.

This study employed a purposive sampling strategy based on the data available for the variables under study, intending to select variables with a series long enough to conduct a time-series study. The variables data population was the United Nations Conference on Trade on Development (UNCTAD) and the World Bank Development Indicators Annual Data for Namibia. The study followed recommendations by Eita (2018), who motivated that econometric studies for countries like Namibia, with very few time points, the availability of data would determine the appropriate econometric methodology to be employed. The research strategy encapsulated filtering all macroeconomic constructs in the Dataset that were correlated with FDI, job creation and economic growth. It was then followed by process of eradication, whereby variables with shorter time- series were removed. The final sample was a selection of variables with the optimum feasible number of complete observations ranging from 1991 - 2017.

3.2.2 The Specification of the Model

Following the objective of the study, a single model was enunciated as follows:

$$\boldsymbol{FDI_t} = f\,(GDP, SLEMP, VUEMP, UNEMP, \mathrm{BIP}, \mathrm{GDS}, \mathrm{GNI}) \quad (1)$$

Where FDI denotes foreign direct investments; GDP represents gross domestic production; SLEMP is the level of entrepreneurship; VUEMP=Vulnerable employment and UEMP is the unemployment rate, UNEMP, Bushiness Intellectual property, Gross Domestic Savings and GNI gross National Income) F is also Natural Logarithm

The Vector Autoregression (VAR) modelling technique is used for forecasting systems of the interrelated time series and for analysing the dynamic impact of random disturbance on the system of variables. VAR models endogenous variable in the system as a function of the lagged value of all the endogenous variables. Moreover, it does not require the orthogonalisation of shocks and is, consequently, not affected by the ordering of the variables used in the VAR models (Ogboko, 2018).

The deployment of VAR models does not allow the researcher to obtain the variance decomposition for any single equation of the system. Thus, limiting the researcher from distinguishing between the direct effect of the policy shock on any unitary variable in the system and the impact resulting from innovations in other variables of the system (Ogboko, 2018). Despite, its feebleness the study adopted, the Engle and Granger (1987) two steps method to estimate the VAR model. Since the VAR model allows the incorporation of feedback in the multivariate model in which all variables allowed to affect each other. Hence, the interaction of all seven variables will be captured.

In Namibia, Ogboko (2018) used the vector autoregression (VAR) approach to the estimation of the impact of foreign direct investment on Namibia's economic performance. In this context, the VAR model assumptions will be tested through Ogboko's (2018) estimation procedure and should any violation of assumptions occur due to sampling size effects then Irpan et al. (2016) ARDL procedure will be implemented. Moreover, their procedures follow the Engle and Granger (1987) two-step technique that involves the estimation of the long run co-integrating or economic equilibrium relationship between variables utilising testing stationarity of the residuals. The Augmented Dickey-Fuller (ADF) test statistic was employed to test if the residuals from the long-run equation are stationary.

3.21 Definition and Measurement of Variables

- FDI_t represents the Foreign Direct Investment Net inflows which are the net difference between FDI outflows and inflows;
- UNEMP is unemployment which measures the ability of the economy to create new jobs. Unemployment is expected to have an inverse relationship with both FDI_Inflows and GDP. Therefore, the prior expectation of effects of FDI is a negative relationship (-vet);

- GDP represents economic growth. Yao (2014) notes that previous studies on the FDI-GDP relationship have positive effects on the host country's economic growth (+vet);
- SLEMP represents the level of Entrepreneurship measured as a percentage of Self-employed to Total employment) (modelled from ILO estimates). FDI-SLEMP relationship is expected to be positive(+vet);
- VUEMP represents the levels of job security in the economy and is measured as a percentage of vulnerable employment to total employment (also modelled from ILO estimate). The FDI-VUEMP relationship is expected to be positive (+vet);
- BIP represents Business Intellectual Property
- GDS represents Gross Domestic savings
- GNI represents Gross National Income
- LN represents Natural logarithm

3.2 3 Descriptive Statistics

The descriptive statistics generated furnished information on the mean, median, minimum, maximum, as well as standard deviation and skewness of the data. This delivered information that assists the discourse determines whether the GDP and FDI variables are symmetric or not. Descriptive statistics also highlight features of the residual of the GDP and independent variables.

3.2.4 Estimation Approach

3.2.4.1 Unit root tests

The first stage in this discourse is to explore whether the time series data comprise unit root or not. If they have unit roots, they are non-stationary. It is incontrovertibly essential because if time series data are not stationary, the results may contain what is called a "spurious regression predicament (Woodridge, 2019)" Since, the data is time-series in nature, it is crucial to confirm its stationarity. The unit root test was executed deploying the Augmented Dickey-Fuller (ADF) test to determine the stationary properties of the variable. The test uses a null hypothesis that the data are non-stationary (there is unit root test), an alternative is that they are stationary (there is no unit root). The natural logarithm of the data variables was tested for stationarity to avoid the problem of spurious regression. The null hypothesis of a unit root is rebuffed in favour of the stationary alternative in each case if the test statistic is more harmful than the critical value

(alpha =0.05). The results of the unit root test of the variable at levels are reported in Table 6. The results for unit root tests are shown in the following formulae:

$$\Delta y_{ij=\ Y_{IY_{I-1}}} + \sum_{J-I\ a_{i-j}}^{P} \Delta Y_{I\ t-y} + b_t + a_{ij}$$

Where i= 1.2 Cross-section

t= 1,2, t time series

t = time trend

a= error term

3.2.4.2 Vector Error Correction Model Co-Integration Analysis and Causality analysis

The Johansen VECM co-integration test was used to establish the long-run co-integration equations between the variables of interest (Yousafzai, 2018). In shaping the number of cointegrating vectors, the study checked for Co-integration using Johansen's Trace Test. However, the trace statistic could not be computed because STATA could not fit the model due to co-linearity of the variables and the fact that the sample was tiny. It was, therefore, assumed that the model is spurious and has no co-integration, as suggested by Bierens (2010). There are numerous techniques to test co-integration such as Engle and Granger slant, Johansen tactic, ARDL bounds testing tactic and Gregory, and Hansen style (Wakayereza, 2019). This discourse applied multivariate co-integration slant to assess whether GDP, FDI and unemployment have long-run equilibrium interaction denote employment.

$$\begin{matrix} \Delta Xit \\ \Delta Yit \\ \Delta Zit \end{matrix} = \begin{matrix} a1 \\ a2 \\ a3 \end{matrix} + \left[a_{1a_2\ a_3}\right\} \begin{matrix} e^x \\ e^x \\ e^x \end{matrix} + \sum_{i=1}^{4} a_{1X_{t-1}} + \sum_{i=1}^{4} a_{3t}\, z_{t-t} + \begin{matrix} e_x \\ e_x \\ e_x \end{matrix}$$

Y denote Gross domestic product Z denote foreign direct investment. The subscripts i and t denote the cross-section (sectors of the economy) and time series (years) respectively. The following VECM model is estimated where estimate the speed of adjustment between the variables. In the model below estimate the long-run causality running from GDP to employment where estimate the long-run causality running from foreign direct investment to employment in Namibia.

3.4.2.1 Granger Causality Test

The choice of Granger causality tests was applied to examine the direction of the causalities between the constructs FDI, GDP and unemployment. Granger Causality tests approximated Vector Autoregressive VAR or Vector Error Calculation models for the computation of the test's statistics. Pairwise Granger Causality Tests were executed by the discourse to unravel the trace of causality between variables used in the discourse. The study deploys the Granger Causality test to elucidate the question of provisional causality between FDI, unemployment and economic growth. Pragmatic evidence exists of one-way causality between FDI and GDP. The VAR and VEC models were incumbent on the cointegration check outcomes. A VAR model with variation stationary constructs is approximated for variables which are not cointegrated, and a VEC is approximated otherwise. The Toda-Yamamoto causality tests were used to establish whether there is a causal relationship between the variables in the discourse. Engel and Granger (1987) recognised that if cointegration exists between two constructs in the long run, then there must be either unidirectional or bi-directional granger causality between these two constructs. The formulae for calculating the Granger Causality Test as follows:

$$Y_1 = \beta_0 + \sum_{K=1}^{M} \beta_{K\, Y_{T-K}} + \sum_{t-1}^{N} a_1\, x_{t-1} + u_t$$

$$Y_1 \;\; was\ the\ variable\ to\ be\ tested$$
$$t = represented\ the\ time\ period$$
$$K\&\ i\ \ are\ the\ number\ of\ lags$$

3.4.2. 2. VAR Model Estimation

The researcher approximates VAR (Vector Autoregressive) models of the endogenous variables in Chapter 4, and the models are then tested for misspecification to govern whether the reparameterizations have been successful. The data are first differenced to stationarity, then the constructs in the configuration are given a VAR representation to streamline the process of identifying the time series configuration and to streamline the procedure of estimation. VAR is accelerated to capture both the dynamic and interdependent correlation among variables. The selection of the VAR has several advantages over the univariate time series, and the researcher

does not have to name endogenous or exogenous variables because all are endogenous variables. VARS is very malleable than univariate AR models (Brooks, 2018).

The predicament with the VAR approach is that it does not expose the configuration of the model, and because of that, it may be inefficient in approximating the parameters of interest. The researcher deployed a VAR technique amplified by the Hendry and Mizon (1978) general to appropriate methodology. The researcher attempted to generate models which are harmonious in the sense that they meet the range of tests unswerving with the estimation method and which meet the usual parameter stability and prediction criteria. The VAR is asymptotically efficient, and we have seen that VARs can be given a numerical symbol of different representations. The features VAR takes depend on the Degree of integration and cointegration of the series, but independent of such considerations the VAR in levels can always be estimated. The formulae adopted in this research for VAR is as follows:

$$y_{1=}\ \beta_{5+}\ \beta_{6\,y1-1+}\ \alpha_{6y2_{t-1+u1}}$$

$$Y_{2=}\beta_{10+Y1-1+}\ \alpha_{10\,Y1\,t-1+U2}$$

3.2.4.3 Impulse Response Analysis

The research makes use of important subsequent methodological innovations in the estimation of impulse response functions in Foreign direct investments. The econometric model robustly shows the projection model to analyse three variables of unemployment, GDP and FDI. In related research work, it is of interest to learn the response of one variable to an exogenous shock in another variable. Consequently, it is vital to investigate the impulse response correlation between the FDI inflow, GDP and employment in Namibia. The researcher estimates the impulse response function of employment in Namibia to the exogenous shock in FDI inflow and GDP. The Impulse response analyses show that, as time passes, the effects of a shock in FDI inflows is cyclical today decay every 2-3 years. The role and essence of FDI in triggering business cycles as evaluated through royalty payments and other intellectual property charges. The impulse construct of $yt\ at\ horizon\ h \in (0.H)\ in\ state\ j \in (br)^{3}\ to\ a\ shock \in_{t}\ is\ estimated\ as\ the\ coefficient\ \beta^{j}_{h\ in\ the\ following}$

$$yt + h = rt\ (\ \partial\frac{b}{h} + \beta\frac{b}{h}e_{t\ +y^{b}}\ X_{T}\ )\ F\ (\ Zt\ ) + (\ a\frac{r}{h} + \beta\frac{r}{h}\ \ + e_{t\ +y^{b}}\ x^{t})(1 - F(Zt)Ui$$

Where r is a linear time trend $\partial \frac{b}{h}$ Is a constant and xt are controls F is the state of the economy as measured by GDP. An impulse response function residue the effect of a one-time shock to one of the innovations on current and future values of the endogenous variables. They measure the relative essences of shocks emanating from one variable in elucidating another variable. As anticipated, the most substantial vitality is placed on each construct in elucidating itself. It tells how much of a variation in a construct its shock is and how much is shocks of other variables. The researchers show that plot the impulse-response of FDI to BIP, which at the initial period, a positive shock on FDI inflows will lead the Intellectual property charges to go down by the shocking amount - thus the initial value of one.

3.3 Stability Test

In order to identify whether the number of cointegrating equations correctly specified, a VAR stability test is executed. The stability test verifies the eigenvalue stability circumstance in a VAR model. CUSUM trials and CUSUM of squares trials are deployed to assess whether the parameters of the models are stable or not. The CUSUM test is incumbent upon the aggregate total of the recursive residuals. This choice schemes the aggregate sum, together with the 5% critical values. The tests find parameter variability if the cumulative total goes exterior to the area between the two critical lines. Referring to CUSUM of square checks, analogous to CUSUM checks, mobility exterior to the critical lines are reminiscent of the parameter of instability. If the aggregate sum of squares is exterior the 5 % significant values, it would be expressive that the residual variance is somewhat unstable (Sarkar, 2017).

3.4 Limitations

It was apparent that the size of the sample applied in executing the discourse was insignificant. Consequently, the Toda-Yamamoto (1995) test may have suffered size falsification and reduced power (Mavrotas and Kelly 2001). Contrary to this discourse they did not apply a bootstrap simulation to explore the performance of the Toda-Yamamoto test. There is an enormous amount of discourse about FDI; consequently, the literature review in this discourse was by no means exhaustive but covered some of the significant studies on this subject.

Chapter 4:

Results, Discussion and Interpretation of Findings

4.1 Introduction

This chapter presents the findings, gives an analysis of results and discussion of findings. The research was analysing historical data for the period 1991 to 2017. Several sources were available to varying levels of detail.

4.2.2 Descriptive Summary

The summary statistics for the series of the data set is given in Table 5. Table 5 shows the average value of the series as a mean and intermediate value of the series as the median. For all the series, the value of means and medians are close to each other indicating minor symmetry. The supreme and minimum values of series are also given for each series under the row maximum and minimum, respectively. While the measure of dispersion around means in the series is calculated as the standard deviation. In relative terms, a comparison of the standard deviations for two different distributions, show that the distribution with smaller standard deviation means less dispersion and more widespread standard deviation shows a high dispersion. Accordingly, in Table 5, ln (UEM) is a less dispersed series with a value of 0.09 while intellectual property charges (LNBIP) is the highly dispersed series with a value of -3.17. As such, BIP has been highly volatile in the period under study.

Table 5: Descriptive Summary

Stats	**LNGNI**	**LNGDS**	**LNGDP**	**LNFDI**	**LNBIP**	**LNUEM**	**LNVEM**	**LNSLEM**
Mean	23.32	2.43	22.56	19.26	14.63	3.71	3.44	3.56
Median	23.26	2.59	22.61	19.48	15.05	3.73	3.41	3.57
Min	22.92	-0.11	21.83	14.28	-0.99	3.54	3.09	3.31
Max	23.94	3.19	23.31	20.88	16.54	3.84	3.77	3.79
Std. Dev	0.28	0.66	0.55	1.36	3.17	0.09	0.20	0.13
Skewness	0.74	-2.31	0.11	-1.78	-4.64	-0.20	0.00	-0.14
Kurtosis	2.59	9.27	1.34	7.71	23.44	1.95	2.21	2.68
N	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**

Notes: LN=Natural logarithm; GNI=Gross National Income; GDS=Gross Domestic Savings; GDP=Gross Domestic Product; FDI=Foreign Direct Investments; BIP=Business Intellectual Property; UEM=Unemployment rate; VEM=Vulnerable Employment; SLEM=Self-employment

In order to test whether the data were distributed normally, we can look at the measures of kurtosis and skewness (Hair et al., 2013). Kurtosis looks at the distribution's peak or flatness relative to the normal distribution, while skewness describes distributions that are unbalanced and shifted to one side, i.e. right-negative skewness or left-positive skewness, and 0 in the case of balanced normal distribution. From Table 5 results, most of the variables have a skewness close to zero, indicating the normal distribution. However, the net FDI inflows are not generally distributed with a negative skewness of -1.72 and Kurtosis of 7.82. Similarly, BIP is not generally distributed with negative skewness of -4.64 and Kurtosis of 23.44. For both skewness and kurtosis, the critical values should be within the 'range of ± 3' in order to accept that data distribution is not far from the average (Hair et al., 2013).

4.2.3 Unit root tests

Since the data is time-series in nature, it is essential to confirm its stationarity. The unit root test was conducted using the Augmented Dickey-Fuller (ADF) test to determine the stationary properties of the variable. The test uses a null hypothesis that the data are non-stationary, and the alternative is that they are stationary. The natural logarithm of the data variables was tested for stationarity to avoid the problem of spurious regression. The null hypothesis of a unit root is rejected in favour of the stationary alternative in each case if the test statistic is more harmful than the critical value (alpha =0.05). The results of the unit root test of the variable at levels are reported in Table 6 below.

Table 6: Augmented-Dick Fuller (ADF) Unit Root Tests

Variable	ADF			Integration Order
	Level	First differenced	Second Differenced	Level/ Diff
LNGNI	-2.329	-3.02**		I(0) / I(1)
LNGDS	-0.850	-4.279***		I(0) / I(1)
LNGDP	-0.672	-3.749***		I(0) / I(1)
LNFDI	-1.365	-5.028***		I(0) / I(1)
LNUEM	-1.852	-2.072	-3.585***	I(0) / I(2)
LNSLEMP	-2.774	-3.877***		I(0) / I(1)
LNEMPVU	-2.619*	-3.128**		I(0) / I(1)
LNBIP	-2.652*	-4.606***		I(0) / I(1)

Notes: LN=Natural logarithm; GNI=Gross National Income; GDS=Gross Domestic Savings; GDP=Gross Domestic Product; FDI=Foreign Direct Investments; UEM=Unemployment rate; VEM=Vulnerable Employment; SLEM=Self-employment. BIP=Business Intellectual Property ***, ** and * represent the rejection of the null hypothesis at the 1%, 5% and 10% level of significance respectively. **Source: Author's compilations**

Table 6 shows the results of the unit root tests, with most of the variables become stationary at the first difference, except for Unemployment (LNUEM). The natural logarithm variables were all stationary at the first difference, I (1). Therefore, the results show that the rest of the variables have an integration order of 1. Therefore, we can specify and estimate our VAR models, focusing on the relational effects of FDI with job creation and economic growth factors. Despite, the results in Table 6 showing that unemployment was stationary at the second difference, the study still used a VAR model to address the objectives of this study.

Moreover, there is a contentious issue in the literature on the use of VAR models in cases of non-stationarity. The issue pertains to there being no clear cut on the choice of estimating the variables in levels and differenced. As a result, the study implements the VAR model in the line, Ogboko's (2018) study on the relationship between foreign direct investment and economic growth in Namibia. Therefore, the study implements the VAR model in the line, Ogboko's (2018) study on the relationship between foreign direct investment and economic growth in Namibia.

In this study, Ogboko (2018) used a VAR model and motivated that if cointegration does not exist, it is recommended to use the differenced variables as per (Mousa, 2010) and (Sheefeni, 2013). Moreover, Enders (2004) advocates for the traditional approach of transforming the data to stationary regressors before estimation, regardless of whether the point of focus is long- run or short-run relationships. Similarly, this study transformed the variables to their natural logarithms.

4.2.4 Diagnostic Tests

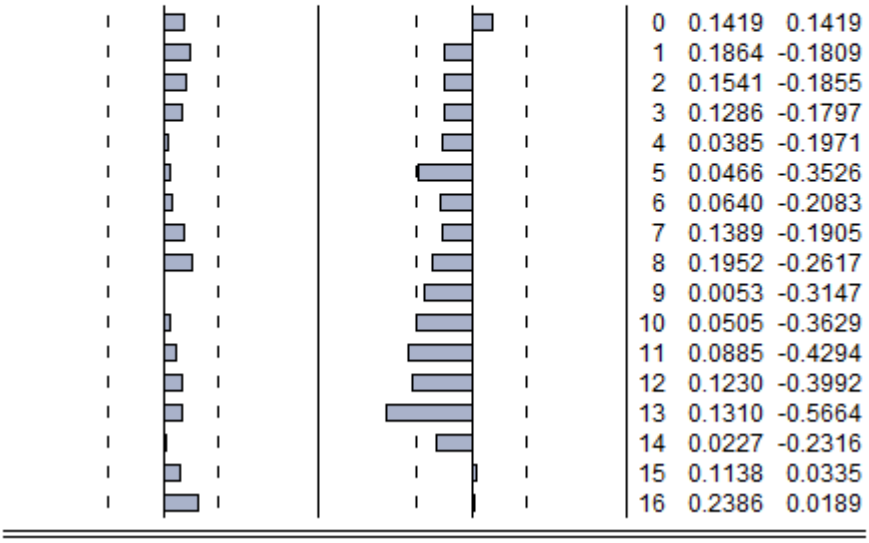
To ensure whether the VAR is correctly specified or not, a set of post estimation and diagnostics tests such as serial correlation, normality tests Johannsen cointegration test, the Granger causality test and heteroscedasticity were done.

4.2.4.1Correlation Matrix Results on FDI INFLOWS

The correlation matrix demonstrates that the results are less than 0.5, with the leads ranging from -0.1419 to 0.0189. We need to accept the hypothesis that says FDI has no causal effects on economic growth in Namibia and reject the hypothesis which stipulates that FDI has a causal effect on economic growth in Namibia. There is no significant impact of FDI on economic growth. It means that economic growth is not contributed by the FDI significantly. It means

that economic growth is mainly contributed by other factors significantly. The results of the research are like Achuhutan (2018), who found no significant relationship between FDI and economic growth; however, in the long run, there is a significant correlation between the variables. Based on the overall study findings, the researcher concludes that there is no significant impact of FDI on economic growth, which is on the lowest level. In contrast, the researcher found that, in the Sri Lankan context, there is a long-run equilibrium relationship between FDI and economic growth rate (Achchuten, 2018).

Date: 01/10/20 Time: 11:25
Sample: 1 37
Included observations: 30
Correlations are asymptotically consistent approximations



FDI,GDP(-i)	FDI,GDP(+i)	i	lag	lead
		0	0.1419	0.1419
		1	0.1864	-0.1809
		2	0.1541	-0.1855
		3	0.1286	-0.1797
		4	0.0385	-0.1971
		5	0.0466	-0.3526
		6	0.0640	-0.2083
		7	0.1389	-0.1905
		8	0.1952	-0.2617
		9	0.0053	-0.3147
		10	0.0505	-0.3629
		11	0.0885	-0.4294
		12	0.1230	-0.3992
		13	0.1310	-0.5664
		14	0.0227	-0.2316
		15	0.1138	0.0335
		16	0.2386	0.0189

4.2.4.2 Heterostadicity and homodastadicity

Ho There is heterostadicity in the data collected of FDI, GDP, unemployment

Ha, There is no heterostadicity in the data collected of FDI, unemployment and GDP

Table 1A Heteroskedasticity Test Breusch -Pagan Godfrey

Heteroskedasticity Test: Breusch-Pagan-Godfrey Period 2003 to 2016.

F-statistic	7.220407	Prob. F (5,54)	0.0000
Obs*R-squared	24.04077	Prob. Chi-Square (5)	0.0002
Scaled explained SS	142.1026	Prob. Chi-Square (5)	0.0000

Test Equation:
Dependent Variable: FDI

Method: Least Squares
Date: 11/14/19 Time: 21:26
Sample: 2002Q2 2017Q1
Included observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-153409.6	291141.1	-0.526925	0.6004
FDI_AND_GDP	-310.5019	59.43645	-5.224098	0.0000
GNI	5874.767	3069.277	1.914056	0.0609
GDS	859.3565	412.5375	2.083099	0.0420
EMP	1671.838	724.6838	2.306990	0.0249
UEM	784.4024	476.3371	1.646738	0.1054

R-squared	0.400679	Mean dependent var	216405.3
Adjusted R-squared	0.345187	S.D. dependent var	833713.6
S.E. of regression	674645.4	Akaike info criterion	29.77640
Sum squared resid	2.46E+13	Schwarz criterion	29.98584
Log-likelihood	-887.2921	Hannan-Quinn criteria.	29.85832
F-statistic	7.220407	Durbin-Watson stat	1.429425
Prob(F-statistic)	0.000031		

Using Breusch-Pagan Godfrey, there is no heteroskedasticity between the dependent variable (residuals) and independent variables loans.

4.2.4.3 Johansen Co-integration Test

The Johansen co-integration test was used to establish the long-run co-integration equations between the variables of interest. In determining the number of cointegrating vectors, the study checked for Co-integration using Johansen's Trace Test. However, the trace statistic could not be computed because STATA could not fit the model due to co-linearity of the variables and the fact that the sample was tiny. It was, therefore, assumed that the model is spurious and has no co-integration, as suggested by Bierens (2010).

4.2.4.4 Granger Causality Test

The Toda-Yamamoto causality tests were used to establish whether there is a causal relationship between the variables under study. Engel and Granger (1987) identify that if cointegration exists between two variables in the long run, then there must be either unidirectional or bi-directional granger causality between these two variables. The null hypothesis of no Granger causality is tested. The null hypothesis of no Granger causality between the two variables is rejected if the probability is less than 5% (0.05). In contrast, the null hypothesis is not rejected

if the probability is more significant than 0.05, signifying that there is no causal relationship between the variables. The Toda-Yamamoto Granger noncausality Wald test results are summarised in Table 8.

Table 8: Granger Causality Wald Test Summary

Null Hypothesis			chi2	df	Prob > chi2	Causality
LNBIP	does not Granger cause	LNSLEM	12.72	2.00	0.00	Bi-directional
LNBIP	does not Granger cause	LNUEM	7.12	2.00	0.03	Bi-directional
LNBIP	does not Granger cause	LNVEM	13.07	2.00	0.00	Bi-directional
LNFDI_in	does not Granger cause	ALL	183.74	14.00	0.00	Bi-directional
LNFDI_in	does not Granger cause	LNGDS	17.71	2.00	0.00	Bi-directional
LNFDI_in	does not Granger cause	LNGNI	11.84	2.00	0.00	Bi-directional
LNFDI_in	does not Granger cause	LNSLEM	23.82	2.00	0.00	Bi-directional
LNFDI_in	does not Granger cause	LNUEM	0.62	2.00	0.73	Bi-directional
LNGDP	does not Granger cause	LNGNI	6.53	2.00	0.04	Bi-directional
LNSLEM	does not Granger cause	LNUEM	30.49	2.00	0.00	Bi-directional
LNVEM	does not Granger cause	LNSLEM	13.00	2.00	0.00	Bi-directional
LNVEM	does not Granger cause	LNUEM	24.87	2.00	0.00	Bi-directional
LNBIP	does not Granger cause	LNGDS	15.62	2.00	0.00	Uni-directional
LNFDI_in	does not Granger cause	LNGDP	43.42	2.00	0.00	Uni-directional
LNFDI_in	does not Granger cause	LNVEM	20.81	2.00	0.00	Uni-directional
LNGDS	does not Granger cause	LNGDP	27.10	2.00	0.00	Uni-directional
LNGDS	does not Granger cause	LNSLEM	19.10	2.00	0.00	Uni-directional
LNGNI	does not Granger cause	LNBIP	6.35	2.00	0.04	Uni-directional
LNSLEM	does not Granger cause	LNGDP	10.02	2.00	0.01	Uni-directional
LNVEM	does not Granger cause	LNGDP	12.38	2.00	0.00	Uni-directional

Notes: LN=Natural logarithm; GNI=Gross National Income; GDS=Gross domestic savings; GDP=Gross Domestic Product; FDI=Foreign Direct Investments; UEM=Unemployment rate; VEM=Vulnerable Employment; SLEM=Self-employment

From Table 8, the null hypothesis of no causality from FDI inflows to unemployment is not rejected in both directions. On the other hand, the null hypothesis of no causality was rejected in one direction and not rejected in the other. These led to Uni-directional Granger causality and Bi-directional causality for both directions. The Atlas.ti v.7.5 was used to graphically present the causality relationships inline the research objectives and hypothesis. The Atlas.ti software tools for network development were used to build association and cause networks of the Granger Causality interpretation. The interpretation was further separated into the role and impact of FDI inflows on Economic growth factors and Job creation factors as follows:

The study aims to investigate interrelationships among Foreign Direct Investment, Economic Growth and Job Creation in Namibia in the years 1990-2018. Thus, ensuring that Namibia fully benefits from the FDI, it attracts, through improved job creation and economic growth. As such, the Granger causality results in Table 8 were used to build a graphical representation of these

associations and causalities. The uni-directional causality is represented by the cause of arrow, while the bi-directional or covariant relationships are represented by the associated with double arrows. Figure 4 presents the FDI-GDP causality associations.

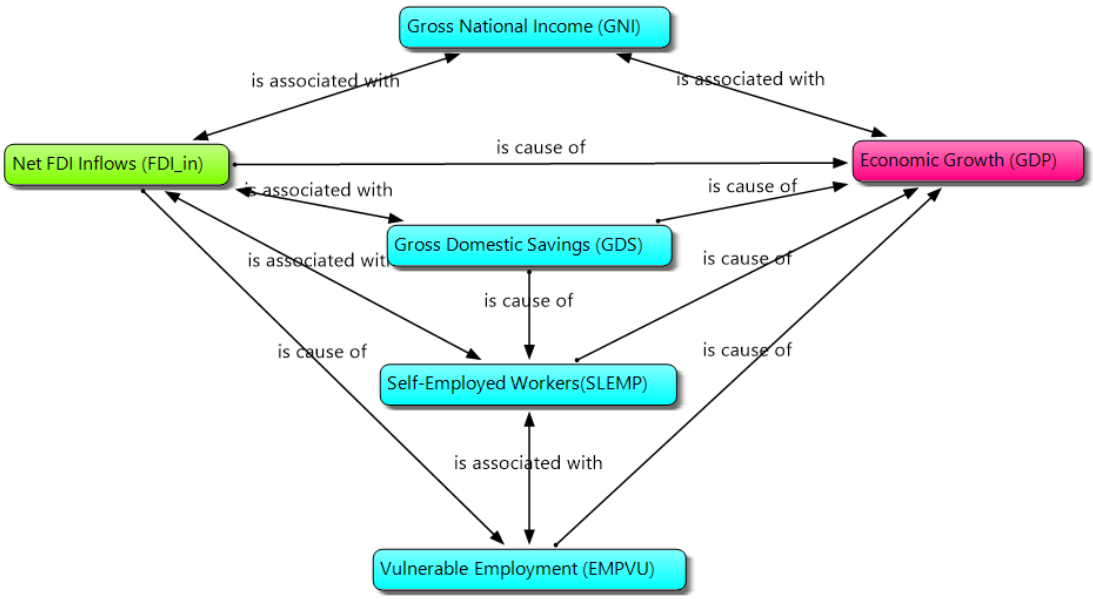


Figure 4: FDI_in – GDP Causality Summary

Figure 4 indicated the existence of a unidirectional causality between FDI inflows and GDP, as well as the related relational effects highlighting the role FDI inflows play in impacting GDP. The results show the Gross National Income (GNI), Gross Domestic Savings (GDS), Self-employed workers and vulnerable employment play an important mediating role between the FDI and Economic growth. However, the results found no causality between unemployment rate with both FDI_in and GDP (Eq. 1). As such, another graphical network was built focussing on the variables related to unemployment rates and FDI. Figure 5 presents the network.

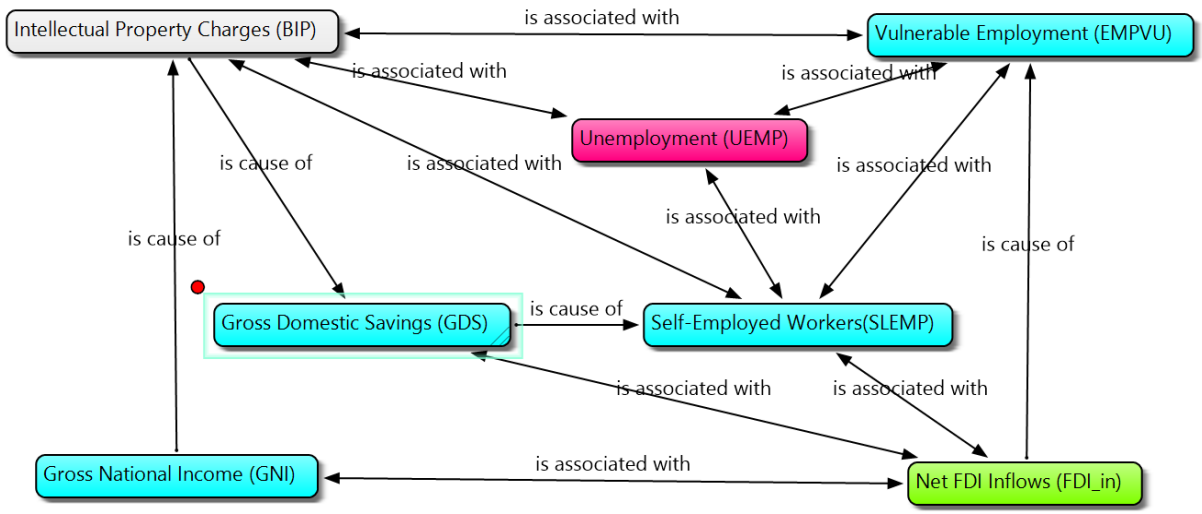


Figure 5: FDI_in – Unemployment Causality Summary

Figure 5 presents the Granger causality role was played by FDI inflows in influencing job creation trends, as measured through unemployment, self-employment and vulnerable employment rates. The findings indicate that FDI_in does not have a direct causality relationship with unemployment. However, it influences the unemployment rate through its associations with GNI, GDS and SLEMP. As well as, through its direct causality relationship with vulnerable employment (Eq. 2). The figure shows that unemployment is associated with SLEMP, EMPVU and BIP (Eq. 3), with SLEMP also having associations with EMPVU, GDS and BIP (Eq. 4). The Intellectual property charges (BIP) has indirect associations with FDI inflows with EMPVU and GNI mediating the associations.

4.2.5 Pre-estimation Lag Selection

In estimating the VAR model, special attention needs to be given to ensure an appropriate specification of the lag length to ensure no serial correlation form the residuals. The need for the lags arises because values in the past affect the current values for a given variable. The calculation of the lags for the various selection criteria was carried out using STATA 15. Table 7 provides the lag length selection for the four-time series variable that were integrated at order 1.

Table 7: Results for Lag Length Selection

Variable	Maxlag	LL	LR	df	P	FPE	AIC	HQIC	SBIC
LNGNI	1	37.6694	67.046*	1	0	.002998*	-2.97245*	-2.94641*	2.87428*
LNGDS	1	-19.9254	10.258*	1	0.001	.364082*	1.82711*	1.85316*	1.92528*
LNGDP	2	19.1931	2.609	1	0.106	.015207*	-1.34942*	-1.31036*	1.20217
LNFDI_in	1	-38.7507	5.4107*	1	0.02	1.74788*	3.39589*	3.42194*	3.49407*
LNUEM	1	-52.8222	12.871*	1	0	6.88751*	4.76715*	4.79198*	4.86589*
LNSLEMP	1	-54.7001	8.9398*	1	0.003	8.10926*	4.93044*	4.95528*	5.02918*
LNEMPVU	1	-62.3399	9.7554*	1	0.002	15.7578*	5.59477*	5.61961*	5.69351*
LNBIP	0	-62.7028				11.8311*	5.30856*	5.32159*	5.35765*
ALL	**4**	**4698.47**	**.**	**49**	**.**	**.**	**-394.563***	**-392.564***	**386.614***

Notes: LN=Natural logarithm; GNI=Gross National Income; GDS=Gross Domestic Savings; GDP=Gross Domestic Product; FDI=Foreign Direct Investments; UEM=Unemployment rate; VEM=Vulnerable Employment; SLEM=Self-employment; BIP=Business Intellectual Property
* represents a 5% level of significance

Table 7 indicates the maximum significant lag selected for each variable. The results show the sequentially modified Likelihood ration (LR), the log-likelihood (LL), the Final Prediction Error (FPE), Schwartz information criterion (SBIC), Akaike Information Criterion (AIC) and Hannan-Quinn information criterion (HQIC), test statistics (each test at 5% level). The Table shows that the maximum number of lags to include for a VAR in GDP is 2, as all the selection criterion show significant values at this lag. For the rest, the maximum number of VAR lags is one as determined by significant levels of the test statistics. The results also show that the lag selection for a model, including seven series has an appropriate lag length of 4. Therefore, the appropriate lag length to use for the Johansen Co-integration Test was 4.

4.2.6 Post estimation Lag selection

Lag selection is an essential step in estimating the VAR model, and special attention needs to be given to ensure an appropriate specification of the lag length to ensure no serial correlation form the residuals. Moreover, the lag selection is made during pre-estimation and post-estimation. The pre-estimation lag selection is discussed above. In this section, the post estimation lag selection is used to obtain the information needed to compute the statistics from the estimated VAR model. The post estimation lag selection was carried out using STATA 15. Figure 3 presents the results.

Figure 3: Post-estimation Lag Selection

Lag	LL	LR	df	p	FPE	AIC	HQIC	SBIC
0	-18.7559				1.20E-09	2.12047	2.24865	2.53051
1	148.632	334.77	64	0.000	3.90E-13	-6.13052	-5.1569	-2.62016
2	274.576	251.89*	64	0.000	2.3e-14*	-11.0861	-9.24704*	-4.45543*

The results in Figure 3 shows that the model is stable at lag two, and information from lag two will be used to estimate the VAR model. This supports Ogboko's (2018) recommendations that if cointegration does not exist, the VAR model should be estimated using the differenced variables as per (Mousa, 2010) and (Sheefeni, 2013).

4.2.9 Stability Test

In order to determine whether the number of cointegrating equations correctly specified, a VAR stability test is conducted. The stability test checks the eigenvalue stability condition in a VAR model. The results of the stability conditions are shown in
Figure 6 below:

```
. varstable

Eigenvalue stability condition
```

Eigenvalue	Modulus
.9242681	.924268
-.08674788 + .8459276i	.850364
-.08674788 - .8459276i	.850364
-.4192068 + .7357236i	.846772
-.4192068 - .7357236i	.846772
.4012256 + .7238753i	.827634
.4012256 - .7238753i	.827634
.7904757 + .2096067i	.817794
.7904757 - .2096067i	.817794
.4939862 + .6267154i	.797994
.4939862 - .6267154i	.797994
-.7108767 + .27336i	.761624
-.7108767 - .27336i	.761624
-.7546289	.754629
.5313704	.53137
.01345644	.013456

```
All the eigenvalues lie inside the unit circle.
VAR satisfies stability condition.
```

Figure 6: LM Test for Autocorrelation

For the VAR model to satisfy the stability conditions, all roots should lie inside the circle, and the modulus must be less than one. At the chosen lag length of 4, the results showed that all the modulus were less than one. The stability check thus confirms that the VAR model is well specified at rank 4.

4.3 VAR Model Estimation

The free Vector Auto Regression (VAR) was used to specify a model guided by the diagnostic test results. Information from lag two will be used to estimate the VAR model, and the Vector Error Correction Model (VECM), which considers the cointegrating relations among the variables was estimated. The STATA command, VECM was used with a rank of 3 and lag of 4, with no constants. The VECM uses the first difference of the variables, such that they are represented as D_LNY, D_LNDD, D_LNEXD and D_LNBD. Further, the R-square value of two of the four variables are good enough to justify their casualty, and p values close to zero also indicates significance.

Table 9: Results of VAR in STATA

Equation	Parms	RMSE	R-sq	chi2	p>chi2
D_LNUEM	17	0.48342	0.8455	131.3369	0
D_LNVEM	17	0.12556	0.7729	81.69066	0
D_LNSLEM	17	0.067569	0.8429	128.7819	0
D_LNGNI	17	0.42892	0.822	110.8162	0
D_LNGDS	17	0.634831	0.6935	54.31179	0
D_LNGDP	17	0.102896	0.7696	80.15746	0
L_LNFDI_in	17	1.17009	0.8076	100.7518	0
D_LNBIP	17	2.05391	0.9443	406.7725	0
AIC	-40.3875				
HQIC	-38.6162				
SBIC	-33.7116				
Number of obs	24				

Notes: LN=Natural logarithm; GNI=Gross National Income; GDS=Gross domestic savings; GDP=Gross Domestic Product; FDI=Foreign Direct Investments; BIP=Business Intellectual Property; UEM=Unemployment rate; VEM=Vulnerable Employment; SLEM=Self-employment

Table 10 shows the results of the VAR estimation. The results are in 8 parts, representing equations of the variables. The results show that al 8 equations are significant with p-value all equal to zero. The R-square values are also sufficiently high with D_LNBIP having the highest R-sq. Of 0.944, however, it also has a very high RMSE of 2.05. As such, the equation with the

lowest RMSE was selected. The lowest root means square error (RMSE) of 0.048 indicates the best fitting model. As a result, equation for the change in Unemployment (D_LNUEM) was selected as the best VAR model for the study. Moreover, the Log-likelihood value of 620.65 is high, indicating consistency. The results for the selected model were D_LNUEM is that the dependent variable is presented in Table 9 below.

Table 10: Results for Significant VAR Equation

Dependent Variable: D_LNUEM					Causality
	Coef.	**Std. Err.**	**z**	**P>|z|**	**Effect**
LNUEM LD.	0.13	0.17	0.78	0.44	Positive
LNUEM L2D.	0.52***	0.15	3.46	0.00	Positive
LNVEM LD.	0.81***	0.17	4.85	0.00	Positive
LNVEM L2D.	-1.15***	0.28	-4.11	0.00	Negative
LNSLEM LD.	-1.49***	0.27	-5.61	0.00	Negative
LNSLEM L2D.	1.89***	0.43	4.42	0.00	Positive
LNGNI LD.	-0.06	0.18	-0.33	0.74	Negative
LNGNI L2D.	0.42**	0.18	2.33	0.02	Positive
LNGDS LD.	0.03	0.02	1.48	0.14	Positive
LNGDS L2D.	-0.03	0.02	-1.62	0.11	Negative
LNGDP LD.	-0.38***	0.10	-3.81	0.00	Negative
LNGDP L2D.	-0.06	0.10	-0.59	0.55	Positive
LNFDI_in LD.	0.03***	0.01	3.30	0.00	Positive
LNFDI_in L2D.	0.03**	0.01	2.82	0.01	Positive
LNBIP LD.	0.02***	0.00	5.56	0.00	Positive
LNBIP L2D.	0.02***	0.00	6.32	0.00	Positive
Constant	0.04**	0.01	2.55	0.01	Positive

Notes: LN=Natural logarithm; GNI=Gross National Income; GDS=Gross domestic savings; GDP=Gross Domestic Product; FDI=Foreign Direct Investments; UEM=Unemployment rate; BIP=Business Intellectual Property; VEM=Vulnerable Employment; SLEM=Self-employment. *** and ** denotes significance at 1% and 5% respectively.

We use the VAR results in Table 10 to examine both the causality between variables in line with the research objectives. Since the stability tests suggest that lag two information be more stable, the interpretation will be based on lag 2, which has significantly identified causality effects among the lagged difference of the variables. The constant identified in the D_LNUEM model is also significant, with 0.01 p-value.

The significance of causality relationships is interpreted from the individual lag beta coefficients and p values for each independent variable. Thus, the results show that the change in unemployment (D_LNUEM) is positively influenced by the 2nd lag difference of LNUEM (beta = 0.52), LNSLEM (beta =1.89), LNGNI (beta = 0.42), LNFDI_in (0.03), LNBIP (0.02). While the 2nd lag difference of LNVEM (-1.15) and LNGDS (-0.03) have negative effects. The results also show that the first lagged difference of GDP has a negative and significant effect on unemployment (-0.38), which implies that all thing being equal, a 1% increase in GDP will result in a 0.38% decrease in unemployment.

4.4 Impulse Response Analysis

An impulse response function traces the effect of a one-time shock to one of the innovations on current and future values of the endogenous variables. The Fixed length Symmetric Baxter King filter shows the impulse response effect for the duration of historical data on FDI, GDP, BIP, SLEM and VEM for the period 1991 to 2017. It can be articulated that from the LNGDP and LNSLEM epitomised by the green response effect line graph has been increasing, above 1. Bank of Namibia(2018) which highlighted that The correlogram for GDP growth shows that the time series for GDP was low in 2000 which was 3.4, in 2001 the GDP growth rate was 1,18, in 2002 the GDP growth rate was 4.7, 2004 it climaxed to 12.27 and descended to 0.30 in 2009. In 2017 the GDP growth rate was merely 0.77.

The impulse response effect for the Foreign Direct Investment and Business Intellectual Property epitomised by the light blue response effect line graph has been fluctuating and vacillating. The same impulse effect can be construed to the LNGP and LNVEM epitomised by the yellow response effect line graph. To some extent LNFDI and LNBIP have shown a deep slope and an excellent slope effect, it has increased above one also slopped negatively below 1 showing fluctuations for the period1991 to 2017. This is highlighted by Bank of Namibia (2018) Statistics show that from 2009 to 2018, the net direct investments in Namibia were detrimental. In 2015 and 2016 the direct investments were at a low ebb having -16 00. In 2018 -8000, while between 2009 to 2010, the direct investments were -600. During the third quarter of 2017, the direct investment was -4000.

Impulse response effect measures the relative importance of shocks arising from one variable in explaining another variable. As expected, the most significant importance is placed on each variable in explaining itself. It tells how much of a change in a variable is due to its shock and

how much due to shocks to other variables. In the short run, most of the variation is due to their shock. Nevertheless, as the lagged variables' effect starts kicking in, the percentage of the effect of other shocks increases over time.

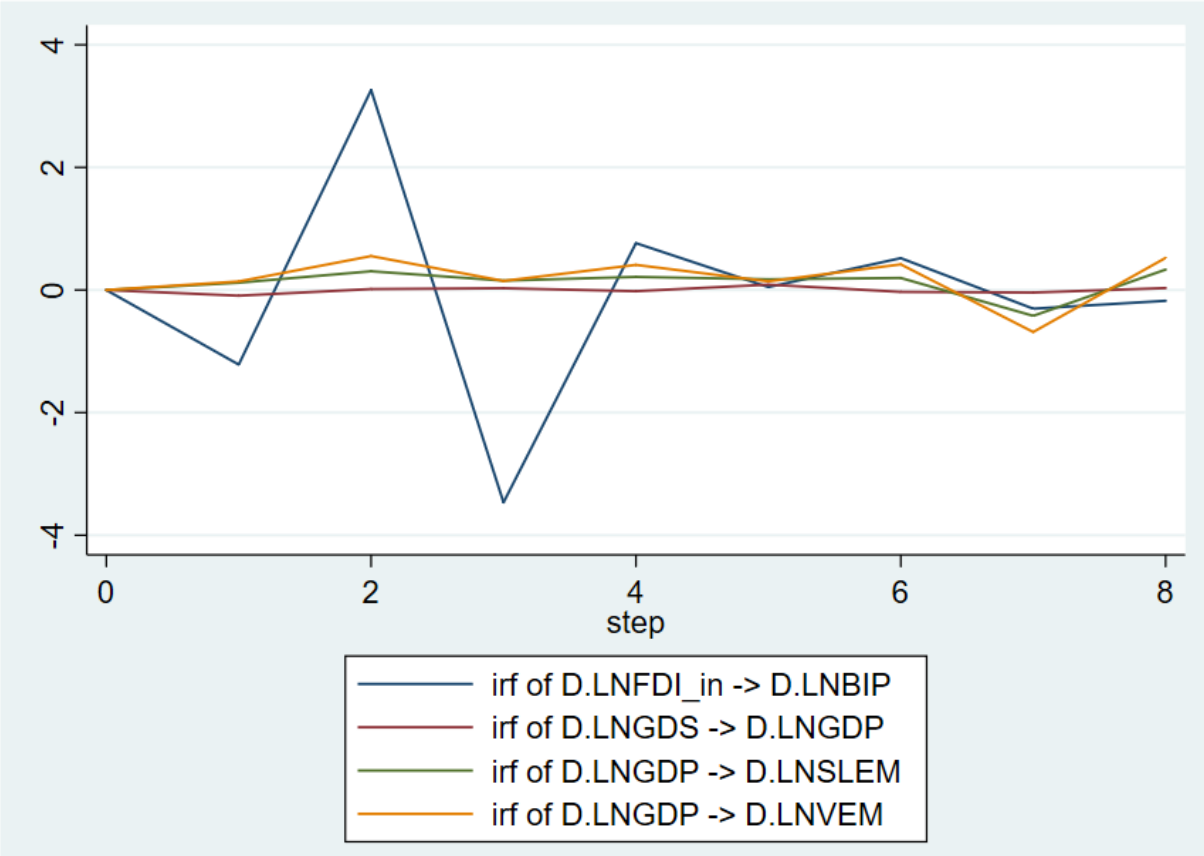


Figure 7: Impulse Response for Economic Growth

Figure 8 results show that plot the impulse-response of FDI to BIP, which at the initial period, a positive shock on FDI inflows will lead the Intellectual property charges to go down by the shocking amount - thus the initial value of one. The plot illustrates that, as time passes, the effects of a shock in FDI inflows is cyclical today decay every 2-3 years. Besides, the results indicated the role and importance of FDI in influencing business cycles as measured through royalty payments and other intellectual property charges. Similarly, figure 8 presents job creation factors and significant impulse responses.

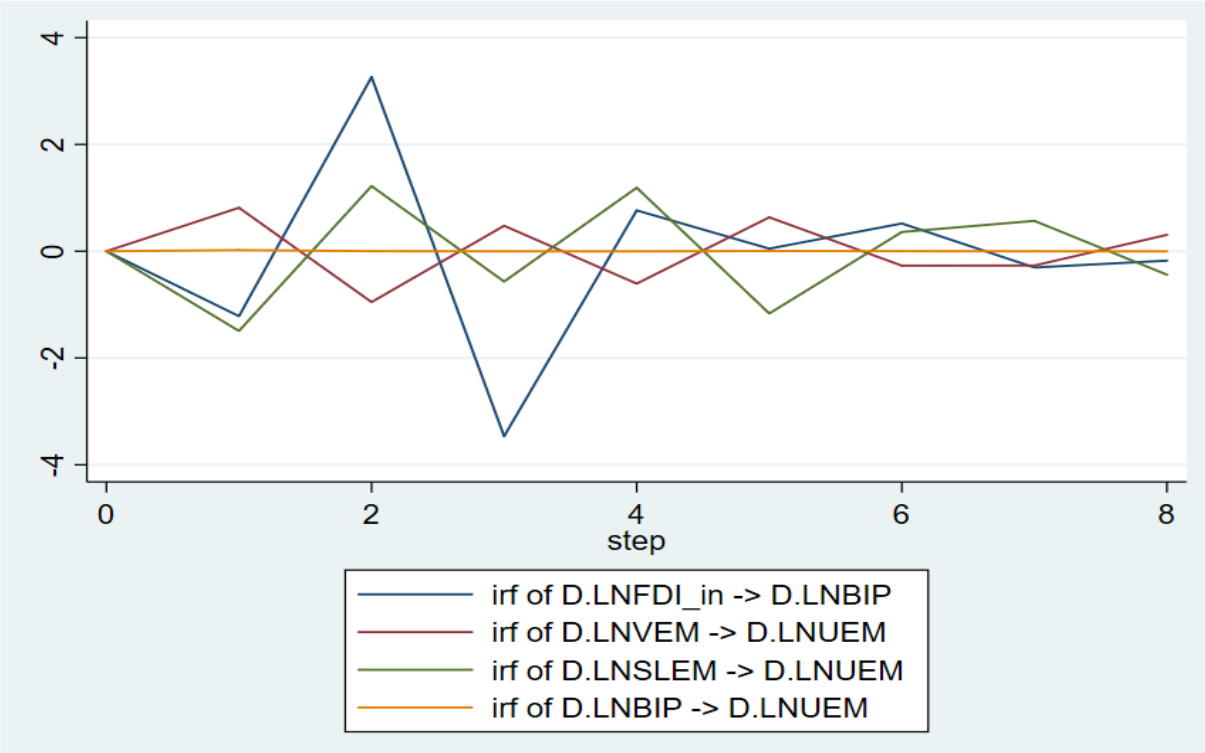


Figure 8: Impulse Response for Job creation factors

4.5 Summary

This chapter presented the data that was gathered during the research. This data was used to determine whether a relationship exists between Foreign Direct Investment, Economic Growth and Employment creation in Namibia. The primary data indicated a sympathetic relationship between growth in FDI stock and growth in the country's GDP. However, no direct relationship was established between FDI Stock or FDI net inflow and the unemployment rate in Namibia. This could be because FDI has a lagging effect on employment that only shows after some time, making it challenging to link the rise in employment directly to Foreign Direct Investment.

Chapter 5

Conclusions and Recommendations

5.1 Introduction

This chapter presents a synopsis of the empirical findings on the causal relationship between Foreign Direct Investment, Economic Growth and Employment Creation in Namibia. It covers sections summarising the dissertation, the conclusion from the empirical analysis, the policy recommendations, as well as recommendations for future studies.

5.2 Summary and Conclusions

The research objective was to: determine the causal relationship between foreign direct investment (FDI) inflows, economic growth and employment in Namibia? Identify specific sectors that have recorded job creation and contributed to economic growth as a direct result of FDI since 1990? This discourse was incumbent upon the Namibian economy for the duration 1991 to 2017. Most of the studies conducted on the effect of FDI on employment furnish conflicting results. However, the effect of FDI inflow in terms of generating employment opportunities has been unclear. The discourse encapsulates all the players in the economy as these have been seized in the annual statistics that embrace the state's Gross Domestic Product, Foreign Direct Investment flows as well as unemployment rate during the period in question. The upsurge economic globalisation has resulted in multinational enterprises (MNE's) making enormous investments in the shape of foreign direct investment (FDI). The inflow of such FDI is construed to be generating employment opportunities in the host state economy in the long run. In order to determine the causal correlation between FDI, economic growth and employment the researcher conducted, unit roots tests, co-integration analysis, causality analysis, impulse response analysis and stability tests. The findings from unit root tests demonstrate that most of the constructs FDI, economic growth become stationary at the first difference, with the exclusion of unemployment (LNUEM). The natural logarithm constructs were all stationary at the first difference, I (1). Consequently, the results demonstrate that the rest of the construction has an integration order of 1. Consequently, we can articulate and estimate our VAR models, motivating on the relational impacts of FDI with job creation and economic growth determinants. The findings from the Johansen cointegration test demonstrates

that the extreme number of lags to embrace for a VAR in GDP is 2, as all the selection criterion show significant values at this lag. For the rest, the maximum number of VAR lags is one as recognised by significant levels of the test statistics. The outcome also shows that the lag selection for a model embracing seven series has a specific lag length of 4. Therefore, the appropriate lag length to use for the Johansen Co-integration Test was 4. The findings from Granger Causality tests show that the null hypothesis of no causality from FDI inflows to unemployment is not rejected in both directions. On the other hand, the null hypothesis of no causality was rejected in one direction and not rejected in the other. These led to Uni-directional Granger causality and Bi-directional causality for both directions. The Granger causality role was played by FDI inflows in influencing job creation trends, as measured through unemployment, self-employment and vulnerable employment rates. The findings indicate that FDI_does do not have a direct causality relationship with unemployment. However, it influences the unemployment rate through its linkages with GNI, GDS and SLEMP.The findings in VAR model estimation demonstrate that the first lagged variations of GDP have a negative and significant effect on unemployment (-0.38), which has an implicature that all thing being equal, a 1% increase in GDP will result in a 0.38% decrease in unemployment. The impulse response findings show that, as time passes, the effects of a shock in FDI inflows is cyclical today decay every 2-3 years. The correlation matrix shows that there is no significant relationship between FDI and economic growth. The findings from this research are analogous to the works conducted in Central and East European Countries taking a specific look at Austria, but this specific discourse wanted to assess employee performance of direct FDI juxtaposed to the indirect FDI (Altzinger & Bellak, 1999 as cited in Rizvi & Nishat, 2013). The study found that the cost of labour mainly influenced FDI's capability to promote employment, that is in environment labour is cheap FDI boasted employment while in the areas where employment is expansive FDI did not improve employment. Direct FDI seemed to follow international standards in employment. However, in the case of indirect FDI, there was an inclination to follow national patterns of employment (Rizvi & Nishat, 2013). It can be concluded that FDI does not have a direct causal relationship with unemployment, while GDP has a negative and significant effect on unemployment. It can also be concluded that there is no significant relationship between economic growth and FDI in the short run; however, in the long run, the relationship can be realised. Therefore, from the above results, it can be concluded that the FDI inflow into Namibia has been positively affecting the employment in Namibia and the presence of foreign firms in Namibia generate employment opportunities. For any country to achieve

greatness, there is a need to attract and retain investors from other countries that bring in different skills and resources. Attracting financial investment is not enough.

5.3 Policy Recommendations

The following recommendations are made to the Namibian Government regarding the acceptance of Foreign Direct Investment in the country. Namibia has been providing many such incentives in the shape of tax holidays, better infrastructure and the launch of the one window operations in the years to come has been done to attract foreign firms to invest in Namibia. The results suggest that there exist a cointegration relationship between the FDI inflow and employment for the overall economy. However, the sector-wise Johansen Fisher panel cointegration test result suggests that the cointegration relationship exists only for the services sector, primary sector and construction sector, while for the manufacturing sector and electrify, water and gas sector there is no cointegration relationship between FDI inflow, GDP and employment. The VECM results indicate that there is both short term and long-term causality between the FDI inflow and employment in Namibia. The impulse response functions clearly show a positive response both by the GDP and employment in Namibia to the exogenous shock in the FDI inflow. However, the positive response in employment is minimal compared to the response of GDP.

It is therefore recommended that there is need to aggressively attract investors that will come, reside and manage the businesses they establish in Namibia. The most exceptional economy in the world, the United States of America was built by immigrants from many different nations of the world, each unique contributing set of skills and resources from their native countries. The result is the first nation with diversity in its people as well as in the products and services that it has to offer. This study has shown that Foreign Direct Investment has a positive impact on the growth of the economy. It also increases employment among the unskilled and semi-skilled citizens. This impact cannot be measured in the short term because the effect is cumulative, and the benefits increase as the cumulative FDI (FDI stock) increases.

The results of this research have some significant policy implications. Therefore, as the results suggest that the FDI inflow has a positive impact on employment, given the results, the researcher also recommends that Namibia pursue the policy of attracting foreign firms

aggressively and create all the conditions required for attracting foreign direct investment in order to create further employment opportunities.

It is recommended that the state enhance a coherent FDI attraction strategy A coherent FDI strategy necessitates a clear vision of how FDI can add value to the economic development of the state. It is therefore recommended that Namibia authorities enhance an FDI policy, fostering on the general economic development strategy, but specific and concentrated on the FDI market opportunities and Namibia competitive positioning. This policy should craft • Clear, realistic objectives. • Corporate roles and responsibilities. • Pragmatic results and performance indicators. • Feasible timeframe. • Structured action plan.

It is recommended that espouse a targeted approach to investment promotion the pragmatism of plethoric OECD states, encapsulating Ireland, the Netherlands, the UK, Australia and Canada has demonstrated that targeted tactic to FDI attraction is by far the most cost-effective way of attaining strategic objectives for FDI policy. A targeted approach to FDI attraction mirrors the income process of the private sector when disposing of their products or services. Targets for FDI attraction should be recognised with the profound use of market intelligence and analysis of the state competitive position. It is therefore recommended that the state of Namibia adopt a more targeted approach to FDI policy by narrowing down its inward investment promotion efforts.

It is recommended that you enhance an investment promotion body crafting a well-structured and well-resourced investment promotion body is a circumstance sine qua non. It is recommended to substitute the present multifarious system of investment promotion in the state with a unitary system that will have the capacity to make and execute policy. The precise location and degree of autonomy need to be decided by the local and national state in collaboration with their partners.

It is recommended that Namibia conduct feasibility studies of product development and enhancing the attractiveness of the state projects that could enhance the quality of the location. These measures include simplification/fast-tracking of all corporate registration and license procedures, deploying a one-stop-shop approach.

It is recommended, therefore, to launch an effective PR investment campaign to foster a positive image of the region. To attain its target, direct marketing should convey a tacit message and be very concentrated on the sectors where Namibia is well situated to compete. The utmost goal of the image development should be the creation of an ideal picture of the Namibia strengths and opportunities crafted to attract the interest of foreign investors. The recommended investment PR plan with its actions, aims and target groups.

It is recommended that Namibia investment policies fundamentally do not distinguish between local and foreign investments. They apply the tenet of national treatment and seek to attract and promote investments from both domestic and foreign sources. It is recommended that the state should visualise an FDI policy with tacit objectives and its protagonist in the regional development plans. In deciding on the objectives, sectors and specific areas in which the region retain relative comparative advantages should be reckoned. It is recommended that there is need to execute FDI attraction strategy to Improve the business ecosystem for FDI, encapsulating human resources development, infrastructure and property development. − Launch practical marketing and promotion tools. – Conduct corporate targeting, lead generation, relationship fostering and account management. It is recommended that the best drill for FDI execution agency should have an advisory board, regulation and approval department, research and analysis department, marketing and analysis, investment support department and operational development.

5.3 Avenues for Future Research

There is a need to revisit the Foreign Direct Policy for Namibia with the drive to attract both local and foreign investors in Namibia aggressively. The concept of rigorously advertising Namibia cultural heritage using international football club having brands such as Chelsea, Barcelona, Real Madrid, Manchester United and the use of celebrities in the movies to attract foreigners to do business in Namibia should be rigorously pursued.

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Appendix 1: World Bank Data Definition and Sources

INDICATOR_CODE	INDICATOR_NAME	SOURCE_NOTE	SOURCE_ORGANIZATION
SL.UEM.TOTL.ZS	Unemployment, total (% of total labor force) (modeled ILO estimate)	Unemployment refers to the share of the labor force that is without work but available for and seeking employment.	International Labour Organization, ILOSTAT database. Data retrieved in September 2018.
NY.GDP.MKTP.CD	GDP (current US$)	GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in current U.S. dollars. Dollar figures for GDP are converted from domestic currencies using single year official exchange rates. For a few countries where the official exchange rate does not reflect the rate effectively applied to actual foreign exchange transactions, an alternative conversion factor is used.	World Bank national accounts data, and OECD National Accounts data files.
NY.GNP.MKTP.KD	GNI (constant 2010 US$)	GNI (formerly GNP) is the sum of value added by all resident producers plus any product taxes (less subsidies) not included in the valuation of output plus net receipts of primary income (compensation of employees and property income) from abroad. Data are in constant 2010 U.S. dollars.	World Bank national accounts data, and OECD National Accounts data files.
NY.GDS.TOTL.ZS	Gross domestic savings (% of GDP)	Gross domestic savings are calculated as GDP less final consumption expenditure (total consumption).	World Bank national accounts data, and OECD National Accounts data files.
NY.GDP.DEFL.ZS	GDP deflator (base year varies by country)	The GDP implicit deflator is the ratio of GDP in current local currency to GDP in constant local currency. The base year varies by country.	World Bank national accounts data, and OECD National Accounts data files.
SL.EMP.VULN.ZS	Vulnerable employment, total (% of total employment) (modeled ILO estimate)	Vulnerable employment is contributing family workers and own-account workers as a percentage of total employment.	Derived using data from International Labour Organization, ILOSTAT database. Data retrieved in September 2018.
SL.EMP.SELF.ZS	Self-employed, total (% of total employment) (modeled ILO estimate)	Self-employed workers are those workers who, working on their own account or with one or a few partners or in cooperative, hold the type of jobs defined as a "self-employment jobs." i.e. jobs where the remuneration is directly dependent upon the profits derived from the goods and services produced. Self-employed workers include four sub-categories of employers, own-account workers, members of producers' cooperatives, and contributing family workers.	International Labour Organization, ILOSTAT database. Data retrieved in September 2018.
BM.GSR.ROYL.CD	Charges for the use of intellectual property, payments (BoP, current US$)	Charges for the use of intellectual property are payments and receipts between residents and nonresidents for the authorized use of proprietary rights (such as patents, trademarks, copyrights, industrial processes and designs including trade secrets, and franchises) and for the use, through licensing agreements, of produced originals or prototypes (such as copyrights on books and manuscripts, computer software, cinematographic works, and sound recordings) and related rights (such as for live performances and television, cable, or satellite broadcast). Data are in current U.S. dollars.	International Monetary Fund, Balance of Payments Statistics Yearbook and data files.
BX.KLT.DINV.CD.WD	Foreign direct investment, net inflows (BoP, current US$)	Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars.	International Monetary Fund, Balance of Payments database, supplemented by data from the United Nations Conference on Trade and Development and official national sources.