

EXAMINING THE RELATIONSHIP BETWEEN FOREIGN INVESTMENT

FLows AND FOREIGN EXCHANGE RESERVES IN NAMIBIA

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ABSTRACT

This study investigated the relationship between foreign investment flows and foreign exchange reserves in Namibia for the period 2005Q2 to 2016Q2. The approach used for this analysis was the simple regression method utilising unit root test techniques. Augmented Dickey Fuller (ADF) results showed that the two variables are stationary in levels suggesting that they are integrated of order zero. The Jarque-Bera Normality test rejected the null hypothesis at 5% and 10% that the normal distribution exists in the series. The Breusch – Godfrey serial correlation tests for autocorrelation in the errors revealed that the data is homoscedastic as desired and not heteroscedastic. Heteroscedastic is when the error term does not have constant variance. White’s (1980) test is a test of the null hypothesis of no heteroscedacity against heteroscedacity of unknown, general form. White’s (1980) test found the residuals not to have constant variance which is desirable, meaning that residuals are homoscedastic. The model was also checked for model stability to determine if there are any structural breaks present in the model. This was done by employing the CUSUM test and the solid line did not exceed the best lines which indicate that the model is a good-fit. The main results from the study found a strong positive and statistically significant relationship between foreign investment flows and foreign exchange reserves in the Namibian context.

Keywords: Foreign Investment Flows, Foreign Exchange Reserves, Foreign Direct Investment, Error Correction Model, Unit Root and Cointegration Model.

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The journey that led to this event is too deep to be summarised. I honour and dedicate this piece of writing to myself. Above all, I give thanks to the God that I serve. His mercy is indeed immeasurable.

DECLARATION

I, Julia Mbai, declare that the content of this thesis represents my own unaided work, and that the thesis has not previously been submitted for academic examination towards any qualification.

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Julia Mbai

Date

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ACRONYMS

ADF	:	Augmented Dickey
BoN	:	Bank of Namibia
BOP	:	Balance of Payment
CMA	:	Common Monetary Area
CUSUM	:	Cumulative Sum
ECM	:	Error-Correction Model
EPZ	:	Export Processing Zone
EUR	:	European Currency Unit
FDI	:	Foreign Direct Investment
FPI	:	Foreign Portfolio Investment
GIPF	:	Government Institutes Pension Fund
IJG	:	International
IMF	:	International Monetary Fund
IRS	:	Internal Registered Stock
ISMA	:	International Security Market Association
NAMFISA	:	Namibian Financial Institutions Supervisory Authority
NFSS	:	Namibia Financial Sector Strategy
NIC	:	Namibian Investment Centre
NSX	:	Namibia Stock Exchange
OECD	:	Organisation for Economic Cooperation and Development
OLS	:	Ordinary Least Squares

SAARC	:	South Asian Association for Regional Cooperation
SACU	:	Southern African Community Union
SME	:	Small to Medium Enterprises
SPE	:	Special Purpose Entities
SSA	:	Strategic Asset Allocation
UNCTAD	:	United Nations Conference on Trade and Development
USD	:	United States Dollar
VAT	:	Value Added Tax
ZAR	:	South African Rand

CHAPTER ONE: INTRODUCTION

1.1 Background of the proposed study

Foreign investment inflow can be in the form of foreign direct investment (FDI), in government bonds or purchases on the Namibia Stock Exchange. FDI is the net inflow of investment to acquire a lasting management interest of 10 percent or more of voting stock in an enterprise operating in an economy other than that of the investor (Mwilima, 2006). In Namibia the capital flows are made up and measured in terms of FDI, Portfolio Investment, other Investment and the International Reserves (BoN, 2006). A key component of FDI in Namibia is the reinvested earnings of foreign direct investment entities operating in Namibia, while portfolio investment is made up of equity and debt securities. The other category is a reflection of funds borrowed by Namibians from foreigners, especially Namibian subsidiaries borrowing from their parent companies for capital expenditure amongst other things. The fourth component of capital flows in Namibia is international reserves.

According to Zeng (2012), foreign exchange reserve is an important indicator that estimates a country's external economic relationships in terms of exports and capital inflow. The reserves influence many factors in the macro-economy such as the Gross Domestic Product (GDP), interest rates and exchange rates. Observers can get a general overview of the condition of a country's macro-economy via the foreign exchange

reserves. Foreign exchange reserves are held in support of a range of objectives including support and maintenance of confidence in the policies for monetary and exchange rate management. In addition, limiting external vulnerability by maintaining foreign currency liquidity to absorb shocks during times of crisis or when borrowing is curtailed (IMF, 2004; Bank of Namibia, 2006). In doing so, foreign exchange reserves provide a level of confidence to markets that a country can meet its external obligation; demonstrate the backing of domestic currency by external assets; assist the government in meeting its foreign exchange needs and external debt obligation and maintain a reserve for national disasters or emergencies.

Various studies have been undertaken to examine the relationship between foreign investment flows and foreign reserves internationally. The studies have mixed findings and this was the motivating factor to investigate such a relationship in the Namibian context. Rahman and Bristy (2015) applied correlation and simple regression and found a strong positive correlation of foreign direct investment and foreign exchange reserves. The study measured the macroeconomic impact of FDI in South Asian Association for Regional Cooperation (SAARC) countries for a period of eleven years. Huang, Qian and Zhong (2011) applied co-integration analysis and the Granger causality test to obtain the relationship between FDI and foreign exchange reserve, using annual data from 1982 to 2008. The test indicates that there exists a long run equilibrium tendency and significant bi-directional Granger causality between China's foreign exchange reserves and foreign direct investment. Another study by Yasir, Shehzad, Ahmed, Sehrish and Saleem (2012)

implies that positive relations exist between foreign investment flows and foreign exchange reserves. The empirical output of co-integration tests suggests that there is an association among foreign exchange reserves, FDI and exchange rate.

On the contrary, Sahni's (2012) empirical study, examined the determinants of FDI in India by taking time series data for the period 1992-93 and 2008-09 applying the Ordinary Least Square (OLS) method. The empirical results indicate that GDP, inflation and Trade Openness were important factors in attracting FDI inflows in India during the post-reform period whereas Foreign Exchange Reserves were not important factors in explaining FDI inflows in India. Saradhi & Goel (2014) analyzed the relationship between the net capital flows (NCFs) and other fundamentals and the real exchange rate (RER) in India consequent to the liberalization of the capital account in the 1990s for the period 1996-1997 and 2012-2013 using the Autoregressive Distributed Lag approach co-integration. The study found that the change in foreign exchange reserves has a negative and statistically significant association with RERs indicating that the accumulation of reserves by the Bank of India in the face of increasing capital flows has prevented the appreciation of RERs and mitigated their adverse consequences on the competitiveness of Indian economy.

This study sought to investigate the effect of foreign investment flows on foreign exchange reserve levels, with particular reference to the Namibian economy. This study aims to contribute to the knowledge pertaining specifically to the relationship of Namibian

foreign exchange reserves and foreign investment a flow, of which little research has been done to date.

1.2 Statement of the problem

The relationship between foreign investment inflows and foreign exchange reserves increasingly became a contentious issue in economics. The one strand found a positive relationship between the two variables while the other strand found a negative relationship between the variables. Studies by Rahman and Bristy (2015), Huang, Qian and Zhong (2011) and Yasir, Shehzad, Ahmed, Sehrish and Saleem (2012) found a positive relationship between the variables while Sahni (2012) found a negative relationship. This has resulted in the controversy surrounding the actual relationship among the variables. More studies have been leaning towards causal relationship between the two variables.

The impact of foreign investment flows on foreign exchange reserves, seem to have received little attention so far in Namibia. Most of the existing literature such as international studies, by Andriano (2012), Carkovic and Levine (2002), Borensztein, De Gregorio and Lee (1998) focused on the relationship between foreign investment flows and economic growth. Emmanuel (2013) investigates the relationship between foreign exchange reserves (FER) accumulation, Exchange Rate, Inflation and Gross Domestic Product (GDP) in Nigeria. The test results show that Exchange Rate and GDP have positive and significant relationship with FER accumulation while inflation has a negative and insignificant relationship with FER. In the Namibian context, the Bank of Namibia

has only studied the relationship between foreign investment flows and economic growth hence, empirical literature on this subject is lacking or very minimal. It is against this background that this study empirically investigated the relationship between foreign investment flows and foreign exchange reserves in the Namibian context in order to shed some light on the matter and fill the gap.

1.3 Objectives of the study

The study aims at examining the relationship between foreign investment flows and foreign exchange reserves in Namibia. This study aims to contribute to knowledge pertaining specifically to the relationship of Namibian foreign exchange reserves and foreign investment flow, of which little research has been done to date.

1.4 Significance of the study

The significance of this study is that it contributes to the knowledge, specifically with regard to the relationship between foreign investment flows and foreign exchange reserves in Namibia. The study is relevant to those in the field of economics and finance.

1.5 Limitation of the study

The study is limited to the above-mentioned variables, namely foreign exchange reserves and foreign investment flows. Quarterly data was obtained for the time period 2005Q2 – 2016Q2. It should be noted that the ten (10) year period's data might have implications

on the interpretation of the results for the long term. In addition, the fact that there appears to be no previous study on this area in Namibia also poses a challenge to the study.

1.6 Organisation of the study

The study is structured in six chapters. Chapter Two presents an overview of the Namibian Stock Exchange (NSX), foreign investment flows and foreign exchange reserves while Chapter Three discusses the literature review. Chapter Four explains the research methodology of the study, dealing with research design, population, sample, research instruments, procedure, data analysis and research ethics. The data analysis outlines the economic framework and model specifications. Chapter Five presents the empirical estimations and analysis of the data as well as an explanation of the various tests used to carry out the study and the data sources of the analysis. Chapter Six summarises the findings, presents the recommendations and concludes the study.

CHAPTER TWO: AN OVERVIEW OF NAMIBIAN STOCK EXCHANGE, FOREIGN INVESTMENT FLOWS AND FOREIGN EXCHANGE RESERVES

2.1 Introduction

This chapter presents an overview of the Namibian Stock Exchange, foreign investment flows and foreign exchange reserve. Section 2.2 gives an overview of the Namibia Stock Exchange (NSX) followed by a discussion of the overview of foreign investment flows. Section 2.3 gives an overview of foreign exchange reserve and the conclusion is presented in section 2.4.

2.2 An overview of the Namibian Stock Exchange (NSX)

The Namibia Stock Exchange (NSX) is an electronic market place for the listing and secondary trading of financial securities such as equities and bonds (NSX, 2015). The Namibia Stock Exchange was founded in 1904, in Lüderitz due to a diamond rush, although the rush was over in 1910 and the stock exchange closed in 1910. With the national independence in 1990 an idea of a second Namibian stock exchange emerged with the plan to build an independent economy.

The NSX oversees and regulates the activities and trading of its member stockbrokers, sponsors and listed companies. It publishes information about trading, listed company information and general information about stock exchanges. The NSX is required by law

to be licensed annually by the Namibian Financial Institutions Supervisory Authority (NAMFISA). The NSX is a non-profit association and its main function is to develop the capital market as the engine of economic growth, development and prosperity in Namibia. In addition, the NSX function is to assist listed companies to raise capital, provide a trading platform for these shares after listing with transparent price discovery in a regulated environment where the best practised corporate governance is prescribed and enforced encouraging investors to buy equities/shares in the first place (NSX, 2015).

The Annual Report of NSX (2015) further states that the role of the NSX is to list companies that want to raise money and/or want to facilitate the subsequent trading in their shares as efficiently as possible. However, it is important to understand that the stock exchange itself does not create or market the business ideas that require finance as that is the responsibility of the stock brokers and sponsors. Therefore, the ability of the company to raise money on exchange and the performance of the company's share price after listing depends entirely on the company itself and external economic factors including the government's management of the economy in terms of the legislative framework.

On the growth of the NSX, the Annual Report indicates that since its launch in 1992, the market capitalisation of shares listed on the NSX has grown significantly with over 70 companies having been listed on the Main Board and the Development Capital Board. The NSX's success in building up reserves has largely been due to the Pension Regulation 28 and the 1990's localization process, driven by the Government Institutions Pension

Fund (GIPF). The NSX benefitted greatly from the Namibian asset requirements of Regulation 28 for Pension Funds and similar Regulation 15 for long-term insurance companies by the dual/cross/secondary listing of companies listed on other international exchanges which have significant investments in the Namibian economy. Since 1994 pension funds have been required to invest 35% of their respective assets in deemed Namibian assets which include dual listed shares purchased through a Namibian Stock Broker on the NSX (NSX, 2015). Effective from 31 December 2014, only 25% of the value of dual listed shares will qualify as Namibian assets and this percentage will reduce by five percent each year to ten percent at the end of 2017.

The Bank of Namibia and the Government of the Republic of Namibia continue to initiate measures aimed at developing Namibia's financial markets. The Bank of Namibia is not the institution responsible for financial market development, but given its position as the manager of the government's debt portfolio and as a major participant in the domestic money market, the Bank is in a unique position to take initiatives and to provide advice to stakeholders to develop a strong, broad and deep financial market in Namibia (BoN, 2009). Developed financial markets ensure continuous access to funds at affordable prices that will enable the development of the local economy. It is also a channel through which the financial sector can be strengthened. Below are some of the highlights of the initiatives taken by the Bank of Namibia over the period under review to contribute to the development of the financial markets in Namibia. The Bank of Namibia in 2015, continued to play both its coordination and execution role of the implementation of the

Namibia Financial Sector Strategy (NFSS). The role involved monitoring the implementation process through progress reports of various implementing agencies. In addition, in the same year, the Bank coordinated a study to investigate how best to coordinate various financial institutions related to Government. The study was necessary to enhance efficiency and effectiveness in order to achieve the intended Government objectives. The proposal is expected to be tabled for approval by the relevant authority in Government. (BoN, 2016). Additionally, during 2015, the Bank of Namibia concluded stakeholder consultations on a study carried out in 2013 to determine the viability of establishing a credit guarantee scheme. The consultative process concluded that such a scheme was indeed necessary to assist Small to Medium Enterprises (SME), who have inadequate collateral to access finance (BoN, 2016).

The Financial Sector Strategy (FSS) was drafted, through an intensified process in 2010 in consultation with the Ministry of Finance and NAMFISA. The Financial Sector Strategy was going to be used as a guiding document for the development of the financial sector in Namibia. In the same year, the Namibian zero coupon yield curve was implemented and primary dealers for the Namibian Government securities were appointed. The primary market dealers are defined as players who are appointed to market government securities and then redistribute these securities to the rest of the market.

The highlight for 2007 was the issue of Bank of Namibia Bills, aimed at assisting commercial banks to meet the statutory liquid asset requirements as well as measures

introduced to bring efficiency into the government auction process. Other initiatives that preceded the afore-mentioned were the successful redemption of the Bank of Namibia's syndicated loan, which was taken up in 2006 to establish a good track record for the country in the international markets, and setting up the permanent Internal Registered Stock (IRS) Redemption Account to fund all future maturing Government bonds.

Additionally, during 2007, the Bank of Namibia undertook a study into the role securitisation could play in deepening the financial sector in Namibia and the study concluded that securitisation could serve as an alternative source of liquidity for any financial institution as a means of diversifying risks, and as a tool for managing interest rate risks. The study however found that securitisation might aggravate the problems of asymmetric information as it is complicated and indeed led to the global financial crisis. Further, the study established that securitisation was not developed in Namibia and thus cautioned potential initiators of securitisation to draw lessons from South Africa and from the general financial crisis.

In 2008, the BoN undertook an initiative to develop the local interbank market. The BoN stated that since the South African financial markets are relatively highly developed compared to the Namibian financial market, the free capital movement within the CMA does less to encourage development and innovation in the local financial market. The commercial banks have been transferring substantial amounts or funds to South Africa, when some local banks are short. On a positive note, the strong link of the Namibian

commercial banking system with South Africa has conferred a number of benefits on the banking system in Namibia such as access to regional and global financial markets, strong ownership ties and common good practices with reputable financial institutions in South Africa. The BoN proposed the following strategies, after analysing the activities of the local interbank market:

- The introduction of the earlier settlement operations before the market closes;
- The introduction of a penalty for the usage of the overnight repo facility;
- Namibia to sign up for the International Security Market Association (ISMA) agreement; and
- The development of an effective repo market, of which the critical factor is to have sufficient debt securities in the market.

2.3 An overview of foreign investment flows in Namibia

As stated earlier, in Namibia, the capital flows are made up and measured in terms of FDI; Portfolio Investments, other investments and the International Reserves (BoN, 2006). A key component of FDI in Namibia is the reinvested earnings of foreign direct investment entities operating in Namibia, while portfolio investment is made up of equity and debt securities. The other investment category is a reflection of funds borrowed by Namibians from foreigners, especially Namibian subsidiaries borrowing from their parent companies for capital expenditure amongst other things.

Increased globalization and integration of world financial markets has seen a significant increase in the amount of foreign investment and world capital flows. BoN (2016) indicates that during the first quarter of 2016, the capital and financial account recorded an increased surplus due to high net capital inflows from FDI and other long term investments. However, the surplus declined remarkably quarter after quarter.

Although decreased investments in Namibian equities led to a steep decline in FDI in 2009, FDI figures rebounded in 2010 and continued to hold steady in 2011 in spite of the ongoing global financial slump. In fact, a significant jump in the third quarter of 2011 resulted in total inflows already well in excess of any previous year on record and this increase stemmed from both the reinvested earnings” and “other capital” sub-categories. The increase under “other capital” reflects funds borrowed by Namibian subsidiaries from the parent companies, especially for capital expenditure. Outflows in portfolio investment continued to outpace inflows, even though this is usually the case in Namibia (BoN, 2011).

According to the BoN (2005) foreign direct investment into Namibia increased due to a rise in retained earnings and equity capital. In addition, FDI in Namibia, which is made up of equity capital, reinvested earnings and other capital - remained constant at N\$2.2 billion during 2006 compared to 2005 in which there were fluctuations. This resulted from an offsetting effect between the components of the sub-account, all of which recorded substantial growth in opposite directions. “Equity capital, an instrument indicating equity investment in Namibia by foreign direct investors, increased substantially from N\$1.2

billion in 2005 to N\$2.6 billion in 2006” (BoN, 2006, p.14). Furthermore, the development in the components of equity capital and reinvested earnings of the foreign direct investment in Namibia suggested that subsidiaries in Namibia funded most of their operations by issuing more equity to non-residents than retaining profits. The rise in other capital outflows during 2006 showed that non-resident parent companies raised more funds from their subsidiaries in Namibia.

Ikhide as cited in BoN (2006) states that from a background of low domestic capital formation, developing countries naturally expect FDI to contribute substantially to domestic investment and hence the economic growth. Ikhide further states that while in a few countries this expectation has been met, the result from a large number of countries is quite contrary. In the Namibian case, a rapid increase in FDI was witnessed during (1996 – 2006) compared to other countries in Africa and the expectation that FDI should complement domestic investment was partially realized. The study by Ikhide suggests that the quality and nature of FDI, enabling economic policies and the cultivation of a pool of skilled workforce are some of the ingredients that Namibia must put in place in order to experience again the FDI inflow that was being experienced from 1996 to 2006.

The Foreign Investment Act of 1990 allowed the formation of the Namibian Investment Centre (NIC) within the Ministry of Trade and Industry. The purpose behind the formation of this center was mainly to facilitate the process of investment. Amongst other things, the act provides liberal foreign investment conditions. Namibia has a very competitive

incentive and fiscal system aimed at attracting investors as well as creating a positive investment environment (Haiyambo, 2013). According to Haiyambo (2013) there are both tax and non-tax incentives applicable to existing and new manufacturing enterprises. To mention a few examples, enterprises operating in the EPZ zone are exempt from paying corporate tax and value added tax (VAT), whereas an 18% corporate tax rate is set for all registered manufacturers for a period of 10 years. These enterprises are further exempted from paying VAT on purchased and 29 imported manufacturing machinery. Finally, enterprises that export manufactured goods receive an 80% allowance on income derived from exporting goods.

2.4 An overview of the foreign exchange reserves in Namibia

In accordance with section 27 of the Bank of Namibia Act, 1997, the Bank is responsible for establishing and maintaining international reserves consisting of certain prescribed external assets. The reserve assets are held to provide support for the issue of domestic currency, as required in terms of the Bilateral Monetary Agreement between the governments of the Republic of Namibia and the Republic of South Africa. Secondly, reserves are also held to enable the funding of international transactions of the country as stipulated in section 28(2) of the Bank of Namibia Act, 1997. Lastly, reserves are held to serve other objectives like maintaining confidence in the country's monetary and exchange rate policies, providing confidence to the international community that the country can meet its external obligations and to ensure the economy is resilient to external shocks (BoN, 2016).

The BoN (2006) adds that some of the reasons for holding reserves are to provide backing for the issue of domestic currency, as per Common Monetary Area (CMA) agreement, and to enable the funding of international transactions. The Bank of Namibia noted during that period that the country's level of reserves was more than sufficient to meet CMA obligations and to support the currency peg.

The official foreign exchange reserves are denominated into three (3) reserve currencies; the South African Rand (ZAR), European Currency Unit (EUR) and the United States Dollar (USD). The reserves are further segregated into three tranches or sub-portfolios based on their objectives as stated below:

- *Working capital tranche* is aimed at meeting the estimated daily liquidity requirements or the expected payments and outflows.
- *Liquidity tranche* is designed to meet short term external debt obligations and import coverage payable within 12 months.
- *Investment tranche* caters for medium and long term payment needs of the country. This portfolio is comprised of funds in excess of both the working capital and liquidity tranches and aims to seek long term returns.

According to the Bank of Namibia (2015), the foreign exchange reserves were managed under very challenging and volatile market conditions. Creating uncertainty in the markets is the uncertainty surrounding the prevailing relatively low prices for commodities such as oil, copper and uranium, the European Central Bank's quantitative easing programme

and the Swiss Bank's announcement to remove its currency peg with the Euro. In addition, the timing of the increase in the Fed rate by the United States' Federal Reserve, slower growth in some of the largest emerging markets such as China, the Greek debt saga and the Rand plunging to over 14-year lows against most major currencies further contributed to the volatile markets. However, during 2015, all foreign reserve portfolios generated positive returns.

The IJG Securities' Monthly Private Sector Extension (2015) highlights the fact that during October, foreign reserves increased significantly due to the inclusion of the proceeds of the second issued Eurobond. It further increased in November, with the increase that primarily comes as a result of rand purchases by commercial banks for the payment of imported goods and services, investment purposes and pension fund swaps that occurred during the month. In January, March and April foreign reserves increased mainly due to SACU receipts and during May it decreased as a result of increased government expenditure and net capital outflows from commercial banks.

However, during June, the foreign reserves increased on account of the deadline for personal income tax payments for the tax year passed, which often results in commercial banks pulling funds back into Namibia, from the Common Monetary Union, as clients make large tax transfers to the government. IJG (2015) further explains that as these payments are made, the banking sector liquidity dries up while Government cash balances are boosted. General seasonal decreases are recorded during February/March and August and end of September due to a lack of significant inflow. IJG in 2015 was of the

assumption that the reserve level at the time was not overly concerned with being watched especially with the currency weakening against the dollar.

The BoN (2012) stated that satisfying the requirements in managing the reserves, the Bank must ensure that the investment objectives of safety, capital preservation and liquidity are met at all times. In order to achieve that, the Bank must determine an optimal combination of assets or currencies that the Bank must hold over an investment horizon that is given from time to time. The Strategic Asset Allocation (SAA) determines the mixture of assets.

Namibian foreign exchange trends and the reasons for such trends will be discussed briefly for the period under review (2005Q2 – 2016Q2). By the end of 2005, the stock of international reserves, stood at N\$1,998 billion. During 2006, the development in the current, capital and financial accounts resulted in a relatively high surplus of N\$1.1 billion, and this resulted in an improved level of foreign exchange reserves to N\$2.94 billion. Reasons cited are the substantial windfall the Namibian government received from SACU, as well as the foreign exchange proceeding of the partial privatization of a mobile telecommunication company (BoN, 2006). The year 2007 saw the reserve level rising to N\$6.46 billion, resulting in a 120.0 percent (%) increase and further to N\$12.7 billion in 2008. For the 2007 increase, the steep increase was as a result of SACU revenue, the rand notes repatriated to South Africa, rand inflows associated with the issuance of the Bank of Namibia Bill while the steep increase in 2008 was as a result of SACU revenue, a decline in commercial bank outflows, following the introduction of a call account facility

by the Bank of Namibia and the depreciation of the Namibian Dollar against both the US Dollar and the Euro. Additional contributing factors to the increase in reserve levels are higher portfolio returns following the significant rally in US and European bond markets, and fiscal discipline by Government, which ensured controlled expenditure and lower outflows from reserves.

As a result of the significant increase in foreign exchange reserves between 2006 and 2008, the Bank of Namibia reviewed its Strategic Asset Allocation (SAA) in 2008, with the aim of deriving a more rewarding risk return investment profile. This led to the slitting of reserves into the three new portfolio tranches per currency, with different investment profiles. The portfolio tranches were Working Capital, Liquidity and the Investment tranche. The Working Capital tranche investment horizon is 0-3 months and its objective is to meet daily liquidity requirements that is the portfolio is all held in cash. The Liquidity tranche objective is to provide a buffer for working capital and to meet liquidity requirements over a year period, while the Investment tranche seeks long-term returns within tolerable risk levels with a 1 – 3 year investment horizon.

The increasing trend of reserves continued during 2009, recording N\$13,8 billion, with the main contributing factors being SACU receipts (N\$8.6million), Special Drawing Right funds of N\$1.58 billion received from the IMF, Rand notes (N\$1.2billion) repatriated to South Africa as well as interest income received of N\$594million for the year (BoN, 2009). However, the reserve level decreased to N\$10, 2 billion in 2010 due to

a decline in revenue from SACU and the commercial banks purchases of the rand. Although a decrease was observed, the reserves were still adequate as they stood above currency in the circulation of N\$1.9 billion and above threshold of N\$4.4 billion for invoking section 28 of the Bank of Namibia Act, 1997.

In 2011, the reserve increased to N\$14.4 billion and further to N\$14.7 billion during 2012 and N\$15.7 billion during 2013 due to the issuance of the Eurobond to the tune of N\$3.9 billion in November 2011 and JSE bond of N\$850 million in 2012, the SACU revenue, the ZAR repatriation and interest income. The objective of issuing the JSE bond was to cater for Government general budgetary needs through diversification of funding sources. During 2013, the reserve increased with the main drivers being the rand notes which were repatriated, compensation for the use of the South African Rand in Namibia as well as depreciation of the Namibian dollar. However, despite the above-mentioned developments, foreign reserves remained under pressure from the rising import bill mainly relating to the construction activities in the mining sector and to a lesser extent, luxury goods.

As expected and due to the pressure, the reserve continued to decrease in 2014 to record N\$13.5 billion. In addition to the rising import bill, the import of luxury goods, government payments as well as commercial bank transfers also contributed to the decline in foreign exchange reserves. SACU receipts, repatriation of the South African Rand as well as compensation for the use of the rand and depreciation of the Namibian dollar eased

the pressure. Despite the decline, the reserves were considered adequate by the benchmark as set by the Bank of Namibia (BoN, 2015).

At the end of 2015, reserves increased by 74.3% to N\$23.6 billion due to the successful issuance of the 10 year ear Eurobond amounting to N\$750 million during October 2015. The Eurobond was complemented by the Bank of Namibia entering into an asset swap arrangement with the Government Institutions Pension Fund, which contributed positively to foreign exchange reserves. SACU revenue and the compensation for the circulation of the South African Rand in Namibia continued to contribute positively while the high level of imports put pressure on the foreign exchange level.

2.5 Conclusion

This chapter presented an overview of the Namibian Stock Exchange, foreign investment flows and foreign exchange reserves. The Bank of Namibia is responsible for establishing and maintaining international reserves consisting of certain prescribed external assets.

The Bank of Namibia is not the institution responsible for financial market development, but given its position as manager of Government's debt portfolio and as a major participant in the domestic money market, the Bank is in a unique position to take initiatives and to provide advice to stakeholders to develop a strong, broad and deep financial market in Namibia. It is the responsibility of the NSX to oversee and regulate the activities and trading of its member stockbrokers, sponsors and listed companies. It

publishes information about trading, listed company information and general information about stock exchanges.

Fluctuating trends are observed, for the then ten (10) year period under review, in the Namibian foreign exchange reserve as a result of SACU revenue, compensation for the rand circulating in Namibia, issuing of bonds, interest rate income, rising import bill mainly relating to the construction activities in the mining sector and to a lesser extent to luxury goods.

CHAPTER THREE: LITERATURE REVIEW

3.1 Introduction

This chapter discusses the literature review and is divided into three sections. Firstly, the theoretical literature is presented in section 3.2, followed by a discussion of the empirical literature discussion in section 3.3 while section 3.4 concludes the chapter.

3.2 Theoretical Literature Review

3.2.1 Theories on Foreign Exchange Reserves

According to Chen, Li, Xu and Lei (2007), there are two different viewpoints on the relationship between foreign exchange reserves and micro-economic variables. The International Trade Financing Demand Theory is of the opinion that the change of foreign exchange reserves reflects the gap between the demand of foreign exchange and real holding quantity and it is also a dynamic course when the foreign exchange reserve approaches the demand for foreign reserve. On the other hand, the Monetary Approach of Balance of Payment Theory points out that the change of one country's foreign exchange reserve is related to its monetary supply. Given the scale of credit, one country's foreign exchange reserve increases when there is an excessive demand in currency domestically and vice versa. Chen et.al further state that based on the aforementioned theories, many scholars around the world have conducted empirical analysis on the optimal foreign exchange reserve.

Reddy (2002) explains that the foreign exchange reserve may be broadly classified into inter-linked areas namely, the theory of reserves and the management reserves. The theory of reserves encompasses issues relating to institutional and legal arrangements for holding reserve assets, conceptual and definitional aspects, and objectives for holding reserve assets, exchange rate regimes and conceptualisation of the appropriate level of foreign reserves. The management of reserves is mainly guided by the portfolio management consideration, that is. how to deploy foreign reserve assets. Reddy (2002) further explains that for policy and operational purposes, most countries adopted the IMF suggested definition of foreign reserve which is external assets that are readily available and controlled by monetary authorities firstly, for direct financing of external payment imbalances and secondly, for indirectly regulating the magnitudes of such imbalances through interventions in exchange markets to affect the currency exchange rate and/or for other purposes. The standard approach for measuring international reserves takes into account the unencumbered international reserve asset of the monetary authority; however, the foreign currency and the securities held by the public including the banks and corporate bodies are not accounted for in the definition of official holdings of international reserves.

Emmanuel (2013) examines the various theories on the accumulation of foreign exchange reserves. The international financial integration theory advocates that international integration should cause capital to flow from high income countries characterised by high capital labour ratios to low-income countries with lower capital-labour ratios. The

approach would improve the levels of investment through access to foreign capital and boost growth in poor countries and support higher returns to foreign investors who will be induced to make capital flows abroad. Foreign exchange liberalisation will therefore facilitate the process of capital flows.

Emmanuel (2013) further states that there is the Micro/Macro Theories based on the controversies of monetarist and fiscalists (Keynesians). Firstly, the monetarists claim that accumulation of reserves is as a result of the excess demand for the domestic currency and the growth of world trade. Secondly, the Keynesians claim the accumulation of foreign reserves is to improve the current account and thereby positively impact on the aggregate input, with this impact being short-run and impacting nominal exchange rate. Fukuda and Kon (2008), as cited in Emmanuel (2013) state that in the long-run, real exchange rates are used to adjust the equilibrium balance of payment. There is therefore a self-insurance theory which explains the holding of buffer stock, of reserves to deal with unforeseen shocks in the international financial systems (Elhiraika, 2007; Fukuda and Kon, 2008 cited in Emmanuel, 2013). Thirdly, there is the mercantilist theory which is related to the expansion of trade and other international transactions because it has necessitated the increase in accumulation of reserves (Gupta and Agarwal, 2004 and Aizenman and Lee, 2005 cited in Emmanuel 2013). Lastly, there is the elasticity approach which examines the effect of an appreciation or depreciation of the exchange rate on resource flows of a country (Notta, 2004 cited in Emmanuel 2013). The approach further states that if there is a downward adjustment of exchange rates, a nation experiencing a

balance of payment disequilibrium has to raise exports and reduce imports and thus accumulate more external reserves.

According to Dominguez (2009) economists have long studied the question of optimal reserve holdings by governments. In the days when countries were part of a fixed exchange rate system reserves allowed countries to avoid costly adjustments to disturbances to external sectors of their economies. As many countries allowed their exchange rates more flexibility, reserves continued to be held for both precautionary and mercantilist motives. Dominguez (2013) provides another reason for the rational for reserve accumulation based on the distortions that arise in countries with underdeveloped financial markets. Dominquez (2013) found that data from financial accounts of industrialised and developing countries indicate that reserve accumulations by developing countries have increased remarkably in the past decade prior to 2009. In addition, developing countries with high levels of investment receive lower, rather than high, net capital inflows. The component of the financial account that is driving this counterintuitive relationship is official foreign reserves. The author finds this puzzling in that standard economic models suggest that capital should flow from rich to poor countries.

Yasir, Shehzad, Ahmed, Sehrish and Saleem (2012) state that the preventative foreign exchange holdings in rising economies are motivated by many features. Economies that are in possession of foreign currency reserves can take themselves out of weak internal

and external shocks firstly, by making the necessary arrangements to correct the exchange rate difficulties of international payments. Secondly, through the implementation of external debt service and the upliftment of the worldwide integrity of the state deal with speculative attacks. Yasir et.al (2012) reason that the cost of holding reserves is low compared to the loss faced in case of emergency crisis in emerging economies. Further, the requirement of foreign currency reserves depends mainly on the exchange rate regime, the volumes of the economy, trade and financial openness and financial deepening, capital controls, and the level of foreign debt and political wavering.

3.2.2 Theories on Foreign Investment Flows

Organisation for Economic and Development (OECD) (2014) defines FDI as a category of investment that reflects the objective of establishing a lasting interest by a resident enterprise in one economy in an enterprise that is resident in an economy other than that of the direct investor. This paper further clarifies that lasting interest implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence (not necessarily control) on the management of the enterprise. The statistical evidence of such a relationship is the direct or indirect ownership of 10% or more of the voting power of an enterprise resident in one economy by an investor resident in another country. The Bank of Namibia (2006) argued that despite the benefits that are gained from FDI in the form of employment, export growth, technology transfers as well as sustained industrial and economic diversification, countries need to take into account the costs that may be associated with FDI inflows.

OECD (2014) explains a new methodology for FDI statistics that came into play late in 2014. The new methodology, referred to as BMD4 provides better measures of where international investment comes from, where it is going, and most importantly, where it is creating jobs and adding value. This is done by distinguishing between ‘real’ FDI as opposed to various financial flows that were counted as FDI but did not add to the real economy. The aim of the new methodology was to provide governments and other stakeholders with a powerful new tool to measure and better understand the economic and social effects of international investments as well as the activities of multinational enterprises. OECD (2014) states that one of the biggest distortions in FDI statistics concerns Special Purpose Entities (SPEs). SPEs are the typical holding companies used to channel capital through countries without generating any significant real economic activity or employment. The previous methodologies did not provide a systematic or agreed way of dealing with SPEs.

The BMD4 is reporting SPE Investments separately, factoring SPE investment out of ‘real FDI’ flows. A second important improvement introduced by BMD4 was the treatment of round-tripping and capital in transit through intercompany loans between fellow enterprises, also referred to as sister companies which have a common parent but have no little (or no) equity stake in each other. The practice can result in a significant overstatement of FDI flows through double (or triple) counting and thereby can also distort the understanding of bilateral investment relationships and mask the location of the ultimate controlling parent (OECD, 2014).

Definitions of FDI from earlier than 2014 such as by Mwilima (2003), state that FDI refers to investments made to acquire a lasting management interest (usually at least 10% of voting stock) and acquiring at least 10% equity share in an enterprise operating in a country other than the home country of the investor. The United Nations Conference on Trade and Development Division on Investment and Enterprises' (2009) definition of FDI is an investment made by a resident of one economy, in another economy and is of a long-term nature or of "lasting interest". The UNCTAD (2009) further clarifies the difference between FDI inflows and Foreign Portfolio Investment (FPI) which is the divergent investment intentions and expectations of benefits of direct investors and portfolio investors.

The UNCTAD (2009) state that many developing countries had attracted only small amounts of foreign direct investments (FDI) despite their efforts at economic liberalisation in an increasing globalising world. This is due to a deficient regulatory framework, a poor business environment and opportunities, weak FDI policies and incentives, poor institutional frameworks, limited market access, unfavourable comparative costs, lack of political stability as well as the scarcity, unreliability and inconsistency of data collection and reporting systems. Reinhart, Calvo and Leiderman (1996) discuss the principal facts, developments and policies that characterise the current episode of capital inflows to Asia and Latin America. The capital inflows were attributed to domestic developments such as sound policies and stronger economic performance.

Singh, Chadha and Sharma's (2012) analytical study on the role of foreign direct investment in India found that international economic integration plays a vital role in Economic Development and FDI is one major instrument of attracting international economic integration. The study concluded that maximum global foreign investment flows are attracted to the developed countries rather than developing and under developed countries. The study recommends that inflow of foreign investment should be welcomed because it enables countries to achieve national goals like favourable balance of payment (bop), rapid economic development, removal of poverty and internal personal disparity in the development.

On the contrary, Reinhart & Reinhart (2008) concluded in their working paper, that capital flows bonanza is no blessing for advanced or emerging economies. In emerging economies, capital bonanzas are associated with a higher likelihood of economic crises (debt defaults, banking, inflation and currency crashes). In developing countries, bonanzas are associated with pro cyclical fiscal policies and attempts to curb or avoid an exchange rate appreciation. For the advanced economies, bonanzas are associated with more volatile macroeconomic outcomes for GDP growth, inflation, and the external account. At the end of the inflow episode, slow economic growth and sustained declines in equity and housing prices are evident.

According to D'Souza (2008) recent capital flows in India have been predominantly portfolio flows and they have been associated with the deteriorating current position. In order to induce foreign savings to finance current account deficits it requires the interest

rate to rise. “When capital flows are associated with rising investment expenditure, economic growth is viewed as sustainable and foreign capital’s willingness to share in the upside benefits through the acquisition of equity increases” (D’Souza, 2008, p. 34). The Reserve Bank of India has been accumulating foreign exchange reserves to prevent the exchange rate appreciation associated with rising capital flows.

Mwilima (2003) states that the main reasons for attracting FDI which are employment creation and capital formation do not have the desired effect because judging from international experience FDI is hardly accompanied by substantial employment creation and in some cases may even lead to job losses. In addition, the problem is the kind of employment FDI creates. In Namibia, for example, the government claimed that the Export Processing Zone (EPZ) programme created jobs and thus reduced the unemployment rate. The type of jobs created however were mostly characterised by poor working conditions and low salaries with no job security. Furthermore, the FDI outflows exceed FDI inflows and South Africa is a good example where between 1994 and 2000 FDI into the country came to R45 billion, while outflows of direct investments came to R54 billion.

Grenville (2012) states that all economists agree that international trade in goods and services is beneficial and should be unrestricted. However, there is less agreement on the benefits of international capital flows, especially in emerging markets due to the volatility and sudden stops experienced over recent decades. The flows to East Asian emerging

economies illustrate the argument. Since the Bretton Woods established the framework and norms for international transactions after World War II, the attitude to international capital flows has changed. At the time of Bretton Woods, it was widely accepted that capital flows might be disruptive and should be treated differently from trade flows. Controls were not only acceptable, but were the norm. In 1971, with the generalised floating exchange rates, capital flows came to be seen as part of the equilibrium process, the more so because market-based outcomes had become the intellectual norm. The central policy message was that flows should be unimpeded by regulation or restrictions. Advocacy of unregulated capital flows should not be hindered by regulation or restrictions.

Carlos and Hernandez (2002) found evidence that contradicts the standard view that groups portfolio equity flows along with short-term debt. The results of the study show that portfolio equity flows respond to policies in a manner similar to that of FDI and in a manner opposite to that of short-term debt, which suggested that portfolio equity is not of a short-term nature after all. Carlos and Hernandez (2002) added that equity investors are concerned with fundamentals and have longer time horizons than debt holders, thus it is a mistake to always group short-term debt and portfolio equity. Further it may also be that short term debt and portfolio equity are substitutes and investors may choose one or the other depending on the incentives created by different government policies.

Cywinski and Harysym (2013) aimed at presenting current achievements in the field of theoretical explanations of FDI and concluded that the common point for theoretical descriptions and observable facts in the FDI spectrum is the existence of technical advantages and a phenomenon of stimulus for innovation. What the authors mean by that is that if between two countries there is FDI interaction, there must be a knowledgeable transfer between them, which in consequence could equalize the level of the world's technical growth in the long term. Marin and Schnitzer (2006) analysed the conditions under which a foreign direct investment involves a net capital flow across countries and found that the financing choice is driven by managerial incentive problems and that FDI involves an international capital flow when these problems are not too large.

Talamo (2011) analysed the existing corporate governance rules which aim to regulate and control the following problems: to restore confidence in the financial markets, to reformulate the existing corporate governance systems and mechanisms that have been inadequate, and finally, to rethink the relationship between ethics and economy. Talamo (2011) also aimed at identifying the factors determining the corporate governance systems and mechanisms in a global economy. His study confirmed the economic theory that less open countries are characterised by stronger ownership restrictions and a weak corporate governance mechanism. On the contrary, open market and investment regimes are particularly powerful instruments to attract investment in general and FDI in particular.

Doojav (2008) explained the internalization hypothesis that believes that firms undertake FDI in order to choose inter-firm transactions instead of market operations due to the existence of transaction cost. The industrialization hypothesis states that firms operating in a foreign country are at a disadvantage compared to the domestic firms because domestic firms are assumed to have lower costs of operation, since they are more familiar with local conditions such as legislation, business culture and language, to mention a few.

3.3 Empirical Literature Review

A study conducted by Rienhart, Calvo and Leiderman (1996) state that a substantial portion of the surge in capital inflows has been channeled to accumulate foreign exchange reserves. The study states that from 1990 to 1994, the share going to reserves has been 59 percent in Asia and 35 percent in Latin America. The two regions have accumulated about N\$209 billion in international reserves over the last five years before 1996. However, after 1996 the pace of reserve accumulation was showing signs of slowing down and an increasing portion of the capital inflows took the form of large current account deficits. The trend was proven by Mexico in 1993 and even more so in 1994 when large reserve losses were recorded.

There has been a very rapid rise since the early 1990s in foreign reserves held by developing countries. These reserves have climbed to almost 30% of developing countries' GDP and 8 months of imports (Rodrik, 2007). Reserve management is an important activity of the central bank as it supports a broad range of national goals. The

Bank of Namibia (2011) states that foreign exchange reserves serve to mitigate the impact of a foreign currency-liquidity shortage or shocks that might follow when access to foreign borrowing and credit lines are limited or withdrawn. The Bank of Namibia (2011)) states that adequate foreign exchange reserves are critical to a country's ability to withstand external shocks and therefore to financial stability.

Onyiwa and Shrestha (2004) state that despite economic and institutional reform in Africa during the past decade, the flow of Foreign Direct Investment (FDI) to the regions continues to be disappointing and uneven. In their study, the fixed and random effects model was used to explore whether the stylized determinants of FDI affect FDI flows to Africa in conventional ways. In the results based on a panel set for 29 African countries over the period of 1975 to 1999, the study identified the following factors as significant for FDI flows to Africa: economic growth, inflation, openness of the economy, international reserves, and natural resource availability. Contrary to conventional wisdom, political rights and infrastructures were found to be unimportant for FDI flows to Africa and therefore the significance of a variable for FDI flows to Africa was found to be dependent on whether country- and time-specific effects were fixed or stochastic.

A study by Aqeel, Nishat and Bilquees, (2005) empirically identified the determinants of growth in FDI in Pakistan over the period of 1961 to 2003. The main interest of the study was to determine how different variables or indicators reflect trade and how fiscal and financial sector liberalisation attracts FDI in Pakistan. The study used the Co-integration and error-correction techniques to identify the variables in explaining the FDI in Pakistan.

The study considered whether the tariff rate, exchange rate, tax rate, credit to private sector and index of general share price variables explained the inflow of FDI. In addition, the study also included wages per capital GDP to test for relative demand for labour and market size hypotheses. The study found that all variables indicated correct signs and were statistically significant except for wage rate and share price index. Furthermore, the study emphasised the role of these policy variables in attracting FDI and determining its growth in both the short and the long run in Pakistan. The study further indicated a positive and significant impact of reforms on FDI in Pakistan.

Choi, Sharma, and Stromqvist (2007) examined the link between net capital flows and international reserves emphasizing the external financing of reserve accumulation in the context of increasing international financial integration. The study's empirical analysis used annual data for 36 emerging markets and 24 advanced countries for the 1980 -2005 period. The study found that the effect of net capital flows on reserve accumulators has shifted from negative to positive for emerging markets but not for advanced countries. The study made use of a regression model and empirical results showed that in recent years emerging markets, with concerns about financing with net capital inflows, have rapidly built up reserves through external financing with net capital inflows, whereas the advanced countries, with more secure access to international finance, have balanced reserve accumulation with investments in higher-yielding foreign assets.

According to Doojav (2008) net capital flows affect domestic supply through accumulation of net foreign currency assets in Mongolia. The data used was done quarterly for the sample 1998Q1 to 2008Q2. In the Granger causality test with three lags the hypothesis that net capital flows do not because money supply was rejected. The results confirmed that money and credit growth are rapidly growing, owing to substantial capital inflows during the time of review.

Huang, Qian and Zhong (2011) applied Co-integration analysis and the Granger causality test to obtain the relationship between FDI and foreign exchange reserves, using annual data from 1982 to 2008. The tests indicated that there exist a long run equilibrium tendency and significant bi-directional Granger causality between China's foreign exchange reserves and foreign direct investments.

A study by Wiboonchutikula, Kotrajaras and Chaivichayachat (2011) analyzed the nature, the determinants and the impact of net capital inflows surging in Thailand after the 1997 financial crises. The researchers used the VAR model and used monthly data from the first month of 1999 to the last month of 2010. The study explains that after the crises, the composition of the net capital inflows were changed from the ones dominated by short-term flows to direct foreign investment. However, in recent years, huge net inflows of short-term loans and portfolio investments have returned. As a result of the surge of total net capital inflows, asset prices increased and foreign reserves grew rapidly as domestic currency appreciated both in nominal and real terms.

Yasir, Shehzad, Ahmed, Sehrish and Saleem (2012) study, explored whether a long-run relationship exists among foreign exchange reserves, foreign direct investments with exchange rate (nominal) in context of Pakistan using conventional, ADF and Johnson co-integration test. Annual data from 1980 to 2010 was used for empirical testing and the output of co-integration test suggested that there is association among foreign exchange reserves, FDI and exchange rate. The results showed that FDI, nominal exchange rate and foreign exchange reserves have significant association both in the short run and long run, which is very important for market participants.

Sahni (2012) empirical study, examined the determinants of FDI in India by taking time series data for the period 1992-93 to 2008-09 and it applied the Ordinary Least Square (OLS) method for this purpose. The empirical results indicate that GDP, inflation and Trade Openness (TO) were important factors in attracting FDI inflows in India during the post-reform period whereas Foreign Exchange Reserves are not important factors in explaining FDI inflows in India. Sahni (2012) findings showed that regression presented, showed that the model is able to explain 89 per cent of variation in the dependent variable, namely FDI. The Durbin-Watson (D.W) statistics showed that the presence of serial correlation could not be confirmed and F-test was also found to be statistically significant at 0.25% level of significance. The regression results further indicated that GDP, Trade Openness and Inflation are important and a pull factor for FDI inflows in India during the post-reform period whereas foreign exchange reserves acted as the deterrent force in attracting FDI inflows in India. All the variables included in the model show the predicted

signs except one variable (i.e. Foreign Exchange Reserves) which deviated from the predicted signs. However, all the variables are found to be statistically significant at 0.25 per cent level.

Alvinasab (2013) study aimed at identifying economic determinants of FDI in Iran for the period 1991 – 2009. The author used a simple econometric model and least squares techniques and found that there is a positive relationship between FDI and the level of GDP, total reserves and infrastructure while labour lost has negative effects on FDI and trade openness does not affect FDI inflows into developing countries. Khachoo and Khan (2012), as cited in Alvinasab (2013), examined the determinants of FDI based on a sample of 32 developing countries for the period of 1982 – 2008.

As indicated earlier, a study by Saradhi and Goel (2014) analysed the relationship between the net capital flows (NCFs), other fundamentals and the real exchange rate (RER) in India consequent to the liberalisation of the capital account in the 1990s. The study utilized quarterly data for the period 1996-1997 and 2012-2013 and used the Autoregressive Distributed Lag approach of co-integration. The study found that the change in foreign exchange reserves has a negative and statistically significant association with RERs indicating that the accumulation of reserves by the Bank of India in the face of increasing capital flows has prevented the appreciation of RERs and mitigated their adverse consequences on the competitiveness of Indian economy.

A study conducted by Osigwe and Uzonwanne (2015) scrutinized the Granger causality of foreign reserves, exchange rate (EXR) and foreign direct investment (FDI) in Nigeria. Annual data for the study ranged from 1970 to 2013. The Dicky-Fuller and Phillip-Perron unit root tests for stationarity of the variables showed that all the variables were non-stationary at levels, but become stationary after first differences. However, the Johansen co-integration test revealed long-run relationships among variables. The Granger causality test showed uni-directional causality from EXR to foreign exchange reserves. Consistently from lag one to lag two; uni-directional causality existed from FDI to foreign exchange reserves.

Rahman and Bristy (2015) conducted a study on the South Asian Association for Regional Cooperation (SAARC) countries. The study covered a time period of ten years starting from 2002 to 2012 on an annual basis. The correlation and simple regression methods using SPSS 16.0 found that if FDI flows into a country it increases the level of gross domestic product, inflation, government revenue, foreign reserve and gross capital formation of that country. On the other hand, if FDI increases, the current account balance is expected to decrease in any economy.

Bano and Tabbada (2015) study examined the extent and determinants of FDI outflows from East and Southern Asian developing countries between 1980 and 2011 using selected home-country specific macroeconomic variables and identifying the key determinants using correlation and regression analysis. The study found that FDI outflows

are closely associated with high levels of GDP, high domestic savings, large foreign reserves, export orientation and relatively large FDI inflows in the source countries with the strength and importance of each factor varying with the level of development.

3.4 Conclusion

The chapter looked at the theories that not only explained but empirically tested the relationship between foreign investment flows and foreign exchange reserves as well as the two variables in relation to other factors. Chen, Li, Xu and Lei (2007) pointed out that the international trade financing demand theory, in foreign exchange theory, is of the opinion that the change of foreign exchange reserves reflects the gap between the demand of foreign exchange and real holding quantity. On the other hand, the Monetary Approach of Balance of Payment Theory pointed out that the change of one country's foreign exchange reserves is related to its monetary supply given the scale of credit, one country's foreign exchange reserve increases when there is an excessive demand in currency domestically and vice versa.

According to Reddy (2002), foreign exchange reserves may be broadly classified into two interlinking areas. The first one is the theory of reserves which encompasses issues relating to institutional and legal arrangements for holding reserve assets, conceptual and definitional aspects, objectives for holding reserve assets, exchange rate regimes, conceptualisation of the appropriate level of foreign reserves and management reserves. The second is the management of reserves mainly guided by the portfolio management consideration, i.e. how to deploy foreign reserve assets.

Emmanuel (2013) examined the various theories on the accumulation of foreign exchange reserves. The international financial integration theory advocates that integration should cause capital to flow from high income countries characterised by high capital labour ratios to low-income countries with lower capital-labour ratios. Emmanuel (2013) further stated that the Micro/Macro theories are based on the controversies of monetarist and fiscalists. The monetarists claim that accumulation of reserves is as a result of the excess demand for the domestic currency and the growth of world trade. The Keynesians claim the accumulation of foreign reserves is to improve the current account and thereby positively impact on the aggregate input, with this impact being short-run and impacting nominal exchange rates.

Theories on Foreign Investment flows mostly examined the definition and methodologies for FDI statistics as well as FDI impact in developing countries versus developed countries. OECD (2014) provided a new methodology FDI statistic, referred to as BMD4 that measures where international investment comes from, where it is going and most importantly whether it is creating jobs and adding value. The measure eliminates the SPE distortion by reporting it separately; therefore factoring SPE investment out of 'real FDI' flows. The methodology further excludes the intercompany loans as these loans result in double (triple) counting and can therefore lead to overstatement of the FDI flows.

Many developing countries failed to attract huge amounts of FDI, in comparison to developed countries. Developing countries' efforts at economic liberalisation in an

increasing globalised world are due to a deficient regulatory framework, poor business environment and opportunities, weak FDI policies and incentives, poor institutional frameworks, limited market access, unfavourable comparative costs, lack of political stability as well as scarcity, unreliability and inconsistency of data collecting and reporting systems. On the contrary it was also found that capital flows bonanza are associated with a higher likelihood of economic crises in emerging economies and pro cyclical fiscal policies and attempts to curb and avoid exchange rate appreciation in advanced economies.

It is recommended that inflow of foreign investment should be welcomed as it enables countries to achieve national goals like favourable BOP, rapid economic development, removal of poverty and internal personal disparity in development. One scholar concluded that if there is FDI interaction between two countries, there must be a knowledgeable transfer between them, which in consequence could equalise the level of the world's technical growth in the long term. Lastly, it was confirmed that less open countries are characterised by stronger ownership restrictions and a weak corporate governance mechanism.

Adequate foreign exchange reserves are critical to a country's ability to withstand external shocks and therefore to financial stability. It was found in the studies that a substantial portion of the surge in capital inflows has been channelled to accumulation of foreign exchange reserves. There is an overwhelming confirmation of a relationship between

foreign investment flows and foreign exchange reserves by Rahman and Bristy (2015); Choi, Sharma, and Stromqvist (2007); Doojav (2008); Huang, Qian and Zhong (2011); Wiboonchutikula, Kotrajaras and Chaivichayachat (2011); Yasir, Shehzad, Ahmed, Sehrish and Saleem (2012), Alvinasab's (2013); Osigwe and Uzonwanne (2015) and Bano and Tabbada (2015). On the contrary, Sahni (2012) and Saradhi and Goel (2014) found a negative relationship between the variable while the rest of the cited authors found a positive relationship. As alluded to, earlier in this study, these contradictory results were the motivating factor in investigating such a relationship in the Namibian context. The next chapter will explain the methodology used for the study and explain the data and data sources included in the study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 Introduction

The chapter presents the research methodology used in investigating the relationship between foreign investment flows and foreign exchange reserves in Namibia for the period 2005Q2 – 2016Q2. This chapter will discuss the research design, population, sample, and research instruments, and procedure and data analysis.

4.2 Research Design

This research was quantitative in nature, using secondary data obtained from the Bank of Namibia's various statutory publications and the Namibia Stock Exchange (NSX).

4.3 Population

The target population of this study were the entire Namibian foreign exchange flows and foreign exchange reserves.

4.4 Sample

The study used the sample of the quarterly time series data for the period 2005Q2 to 2016Q2.

4.5 Research Instruments

The study was quantitative in nature and therefore employed secondary data on net foreign investment inflows and the foreign reserve position in Namibia obtained from the Bank of Namibia and NSX as well as academic journals.

4.6 Procedure

The secondary data was sourced from the Bank of Namibia, Namibia Stock Exchange and from academic journals. The quarterly data used was for the period 2005Q2 to 2016Q2. Indices on the two variables were constructed. The base index was set at 100. Foreign exchange reserve was the dependent variable and foreign flows on the NSX the independent variable that sought to explain the depended variable. A regression was run and the two variables were determined and with the aid of tables and figures the relationship between the two variables was explained.

4.7 Data analysis

Data collected was analysed applying simple regression methods using Eviews. Rahman and Bristy (2015) applied the same methods in their study. Granger and Newbold (1974) cited in Sheefeni (2016) established that regression analysis from non-stationary variables yield spurious results. Therefore, the first step was to investigate the unit root properties of the two variables namely, foreign investment flows and foreign exchange reserves. Although there are numerous tests for unit root, the Augmented Dickey Fuller (ADF) and

Phillips-Perron (PP) were used in the study to investigate the statistical characteristics of the variables as well as to ascertain the order of integration to ensure robustness of the results thereof. The (ADF) tests the null hypothesis that a unit root is present in a time series sample. The PP test is a unit root test that is used in time series analysis to test the null hypothesis that a time series is integrated of order 1.

The procedures resulted in the following relationship between Foreign Exchange Reserves and Foreign Investment Flows:

$$\text{LNFER} = a \text{ LNFF} + b \quad \dots 4.1$$

Where:

LNFER = Foreign Exchange Reserves

LNFF = Foreign Investment Flows

a = intercept

b = slope, regression coefficient

Once it was established that the series are stationary at levels, Equation 4.1 was estimated using the Ordinary Least Squares (OLS) technique. However, if the series was found to be non-stationary at a level, but stationary at first difference, the test of co-integration was conducted to establish whether or not the pair of the series was co-integrated. If it was found that the first difference stationary was not co-integrated, the Equation (4.1) would be estimated with the first series found to be different to avoid the problem of spurious

regression. There are various tests for co-integration but the residual based co-integration test was used in this case.

Further, the model was tested for robustness by employing various diagnostic tests including the Jarque-Bera Normality test, Breusch-Godfrey Serial Correlation Lagrange Multiplier (LM), White General test for Heteroscedasticity, Cusum Stability test and Cusum Squares Stability test. For stability of the long-run and short-run coefficients, the plot of the two statistics had to stay within the 5% significance level.

CHAPTER FIVE: EMPIRICAL ESTIMATIONS AND ANALYSIS

5.1 Introduction

This chapter presents empirical findings and analysis of the foreign investment flows and foreign exchange reserves. It covers one section and three sub-heading sections namely the unit root testing for stationarity, regression analysis and various diagnostic tests, all presented under section 5.2.

5.2 Unit Root

Table 5. 1: unit root test ADF and PP in levels, first difference and second difference

Variable	Model Specification	ADF	PP	ADF	PP	ADF	PP	Order of Integration
		Levels	Levels	1 st Difference	1 st Difference	2 nd Difference	2 nd Difference	
LNFER	Intercept	-7.395**	-7.370**	-7.528**	-23.697**	-5.716**	-26.447**	0
	Trend & intercept	-7.5990**	-7.589**	-7.379**	-21.639**	-5.607	-33.935**	0
LNFF	Intercept	-3.315**	-3.392**	-2.422	-17.525**	-2.819**	-33.7884**	0
	Trend & intercept	-2.431	-5.804**	-3.224**	-17.948**	-2.791**	-33.935**	0

Source: Compilation and values obtained from Eviews

Notes: (a) ** and * means the rejection of the null hypothesis at 5% and 10% respectively

The ADF and PP tests were used to investigate the statistical characteristics of the variables as well as to ascertain the order of integration to ensure robustness of the results thereof. Table 5.1 above presents the results of both the ADF and PP unit root test showing that the two variables are stationary in levels suggesting that they are integrated of order zero.

5.2.1 Regression Analysis

Table 5. 2: Regression output results

Dependent Variable: LNFER				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.317683	1.645555	0.800753	0.4278
LNFER(-1)	-0.167197	0.144688	-1.155573	0.2544
LNFF	0.881264	0.331195	2.660861	0.0110
R-squared	0.160429	Mean dependent var		4.658591
Adjusted R-squared	0.120449	S.D. dependent var		0.167093
S.E. of regression	0.156707	Akaike info criterion		-0.804539
Sum squared resid	1.031396	Schwarz criterion		-0.684095
Log likelihood	21.10212	Hannan-Quinn criter.		-0.759638
F-statistic	4.012770	Durbin-Watson stat		1.966711
Prob(F-statistic)	0.025422			

Table 5.2 shows the results of the relationship between the foreign exchange reserves and foreign investment flows. The study found a strong positive and statistical relationship between the two variables, foreign exchange reserve and foreign investment flows. In particular, the results show that a one percent increase in foreign investment flow leads to an increase of 0.88 percentage in foreign exchange reserves. This is to say there is a positive relationship between the two variables and they move into the same direction. This relationship is statistically significant at 5% as shown by the p-value (0.01), which

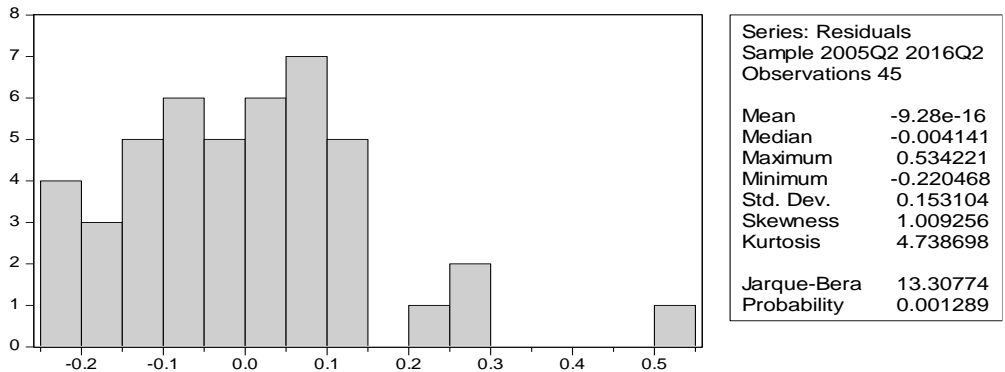
is less the level of significant, meaning that the null hypothesis of no statistical significance was rejected. Alternatively, if one uses the rule-thumb that any variable with the t-value 2 or greater is pronounced as statistically significant. The model shows that only 16% of the variation in the foreign exchange reserve is due to variation in foreign investment flows on the NSX. Moreover, the Durbin-Watson test statistic with the value of 1.9 shows that there is no problem of autocorrelation. The results of this study agree with results from studies by Rahman and Bristy (2015); Choi, Sharma, and Stromqvist (2007); Doojav (2008); Huang, Qian and Zhong (2011); Wiboonchutikula, Kotrajaras and Chaivichayachat (2011); Yasir, Shehzad, Ahmed, Sehrish and Saleem (2012), Alvinasab's (2013); Osigwe and Uzonwanne (2015) and Bano and Tabbada (2015).

5.2.2 The diagnostic tests

Normality test:

To test for normal distribution of the series, the study uses the Jarque- Bera Normality Test. The reported probability exceeds the observed value under the null hypothesis. The study therefore rejects the null hypothesis at 5% and 10% that the normal distribution exists in the series. This is affirmed by the Skewness measure that is above 0 at 1.00 indicating a positive skewness. Kurtosis, which is a measure of the thickness in the tails of the probability density function, is above 3 at 4.73. It should be noted that the non-normality does not nullify the OLS estimators. They still remain unbiased estimators.

Figure 5.1: Jarque-Bera Normality Test



Serial Correlation Langrange Multiplier (LM) test:

The Breusch – Godfrey serial correlation tests for autocorrelation in the errors in a regression model. The model makes use of the residuals from the model being considered in a regression analysis and a test statistic is derived from that. The test below presents probability of 0.7711 which is greater than the chosen levels of 5% and 10% meaning that the null hypothesis of no serial could not be rejected as it is desired.

Table 5. 3: Breusch-Godfrey Serial Correlation LM Test

F-statistic	0.233798	Prob. F(2,40)	0.7926
Obs*R-squared	0.519966	Prob. Chi-Square(2)	0.7711

Heteroscedasticity test:

Heteroscedastic is when the error term does not have constant variance. White’s (1980) test is a test of the null hypothesis of no heteroscedasticity against heteroscedasticity of unknown, general form. The test statistic is computed by an auxiliary regression, where we regress the squared residuals on all possible (non-redundant) cross products of the

repressors. The p-value of Obs*R-squared (5.717) is more than the chosen 5% & 10% meaning that the null hypothesis of homoscedasticity could not be rejected, so residuals have constant variance which is desirable, meaning that residuals are homoscedastic.

Table 5. 4: White General Test for Heteroscedasticity

F-statistic	1.135096	Prob. F(5,39)	0.3583
Obs*R-squared	5.716708	Prob. Chi-Square(5)	0.3348
Scaled explained SS	9.309149	Prob. Chi-Square(5)	0.0974

Figure 5.2: Cusum Stability Test

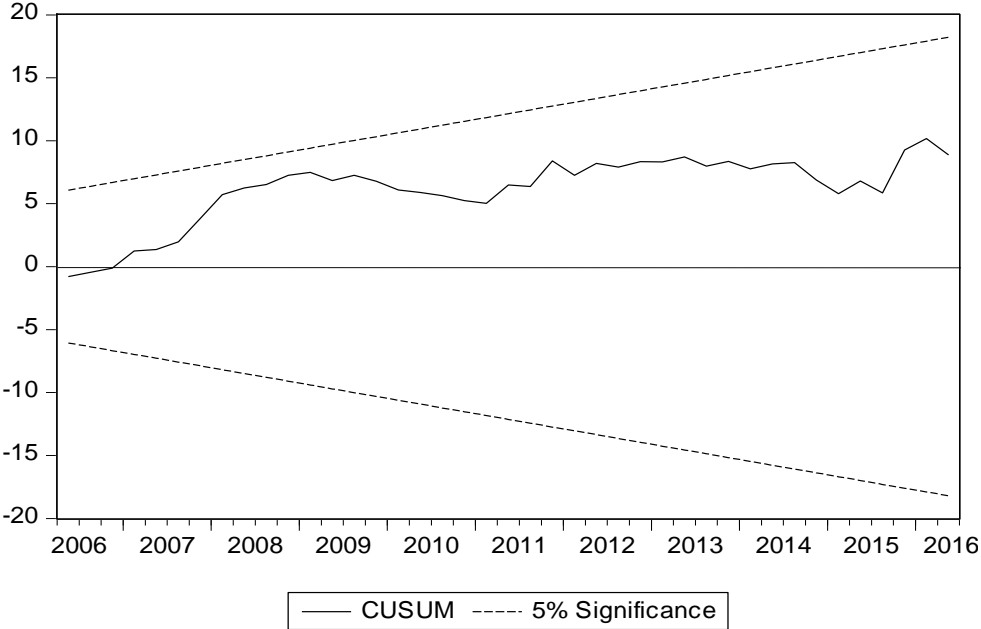
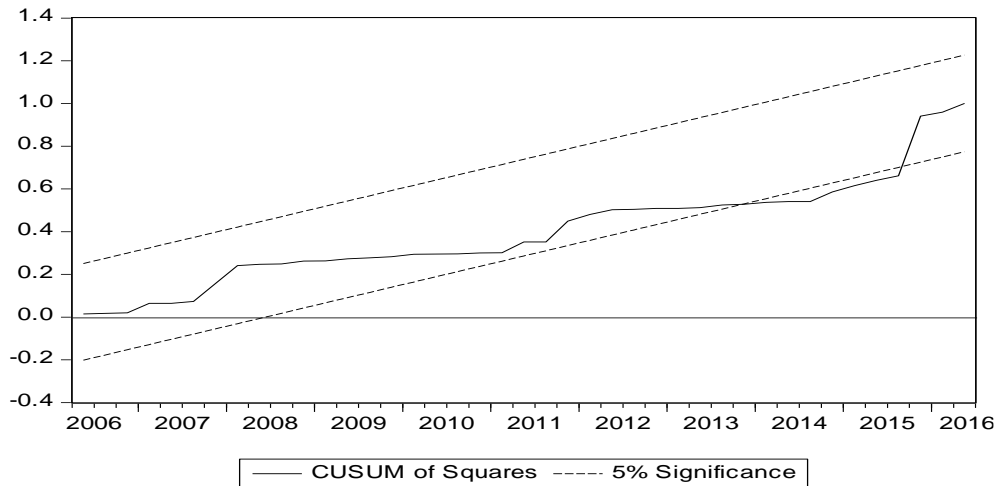


Figure 5.3: Cusum Squares Stability Test



The model was also checked for model stability to determine if there are any structural breaks present in the model. This was done by employing the CUSUM test and the solid line did not exceed the best line which indicates that the model is a good-fit though it did during 2014 and 2015. However, the solid line went back within the accepted bounds or limits.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

The chapter presents the overall conclusions and recommendations. It is divided into two sections. Section 6.2 provides the general conclusion of the study, while section 6.3 discusses recommendations for future research on the topic.

6.2 General Conclusion

The study carried out an empirical investigation on the relationship between foreign investment flows and foreign exchange reserves in Namibia using data sourced from the Bank of Namibia and Namibia Stock Exchange. The period covered is 2005Q2 to 2016Q2 utilising quarterly data. The approach used for this analysis was the simple regression method.

The ADF and PP tests were used to investigate the statistical characteristics of the variables as well as to ascertain the order of integration to ensure robustness of the results thereof. It was found that the two variables are stationary in levels suggesting that they are integrated of order zero.

To test for normal distribution of the series, the study uses the Jarque- Bera Normality Test. The study rejected the null hypothesis at 5% and 10% that the normal distribution exists in the series. The Breusch – Godfrey serial correlation test was used for

autocorrelation in the errors in a regression model. The data is homoscedastic as desired and not heteroscedastic. Homoscedastic assumes that the variance of the error term is constant whereas heteroscedastic is when the error term does not have constant variance. White's (1980) test is a test of the null hypothesis of no heteroscedacity against heteroscedacity of unknown, general form. The residuals were found not to have constant variance which is desirable, meaning that residuals are homoscedastic. The model was also checked for model stability and using the CUSUM test the solid line did not exceed the best lines which indicate that the model is a good-fit.

The study has found a strong positive and statistical relationship between the two variables. In particular, the results show that a one percent increase in foreign investment flow leads to an increase of 0.88 percent in foreign exchange reserves. This is to say there is a positive relationship between the two variables and they move into the same direction. The model shows further that 16% of the variation in the foreign exchange reserve is due to variation in foreign investment flows on the NSX.

6.3 Recommendations

Future research can include some other macro variables such as inflation and interest rate, for which multiple regressions can be conducted. In addition, a comparison between two countries will also be a good research option.

REFERENCES

- Alavinasab, S. M. (2013). Determinants of Foreign Direct Investment in Iran. *International Journal of Academic Research in Business and Social Science*, 3, 258-269. Retrieved from www.hrmars.com/journals
- Aqeel, A., Nishat, M., & Bilquees, F. (2005). The Determinants of Foreign Direct Investment in Pakistan. *The Pakistan Development Review*, 43(4), 651-664. Retrieved from <http://www.jstor.org/stable/41261019>
- Bank of Namibia. (2005). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2006). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2007). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2008). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2009). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2010). *Bank of Namibia Annual Report*. Windhoek : Bank of Namibia.
- Bank of Namibia. (2011). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2012). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2013). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2014). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2015). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- Bank of Namibia. (2016). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia

- Bano, S. (2015). Foreign Direct Investment Outflows: Asian Developing Countries. *Journal of Economic Integration*, 30(2), 359-398. Retrieved from <http://dx.doi.org/10.11130/jei.2015.30.2.359>
- Carlson, M., & Hernandez, L. (2002). *Determinants and Repercussions of the Composition of Capital Flows*. Paris, France: IMF.
- Chen, D., Li, C., Xianjie, X., & Jiasu, L. (2007). An Empirical Assessment on China's Optimal Foreign Exchange Reserve: 1985 - 2004. *Journal of Asia Business Studies*, 1(2), 20-26. Retrieved from <http://dx.doi.org/10.1108/1558789070001292>
- Choi, W. G., Sharma, S., & Stromqvist, M. (2009). Net Capital Flows, Financial Integration and International Reserve Holdings: The Recent Experience of Emerging Markets and Advanced Economies. *International Monetary Fund, Palgrave Macmillan Journals*, 56(3), 516-540.
- Cywinski, L., & Harasym, R. (2012). Review of FDI Theory in the Knowledge-Intensive Economy. *e-Finanse*, 8(4), 35-225. Retrieved from www.e-finanse.com
- Dominguez, K. M. (2009). International Reserves and Underdeveloped Capital Markets. *Chicago Journals*, 6(1), 193-221. Retrieved from <http://www.jstor.org/stable/10.1086/648705>
- Doojav, G.-O. (2008). *Capital Flows and the Implication for Central Bank Policies: The Case of Mongolia*. New York: South East Asian Central Banks (SEACEN) Research and Training Centre.

- D'Souza, Errol. (2008, August). Globalisation's Underbelly: Capital Flows and Indian Economy. *Economic & Political Weekly*, 43(35), 34-38. Retrieved from <http://jstor.org/stable/40278722>
- Emmanuel, U. C. (2013, 9). Foreign Exchange Reserves (Fer) Accumulation and Macroeconomic Stability: The Nigerian Experience. *International Journal of Business and Management Invention*, 150-157. Retrieved from www.ijbmi.org
- Grenville, S. (2102). Taming Volatile Capital Flows in Emerging Economies. *A Journal of Policy Analysis and Reform*, 19(2), 107-120. Retrieved from <http://www.jstor.org/stab;e/43199685>
- Huang, Y., Qian, L., & Zhong, L. (2011). *The relationship between FDI and foreign exchange reserve and its underlying causes*.
- International Monetary Fund. (2004). *Guidelines for Foreign Exchange Reserve Management*. Washington DC: International Monetary Fund.
- Kothe, E., Avery, C., & Gestrin, M. (2014). *International Investment Stumbles into 2014 after ending 2013 flat*. Paris, France: OECD. Retrieved from www.oecd/investment/statistics.htm
- Mwilima Ntwala. (2003). *Foreign Direct Investment in Africa*. Windhoek: LaRRI.
- Namibia, B. o. (2007). *Bank of Namibia Annual Report*. Windhoek: Bank of Namibia.
- NSX. (2015). *Namibia Stock Exchange Annual Report*. Windhoek: Namibia Stock Exchange.
- Onyeiwu, S., & Shrestha, H. (n.d.). *Determinants of Foreign Direct Investment in Africa*.

- Osigwe, A. C., & Uzonwanne, M. C. (2015). Causal Relationship among Foreign Reserves, Exchange Rate and Foreign Direct Investment: Evidence in Nigeria. *International Journal of Economics and Financial Issues*, 5(4), 884-888. Retrieved from www.econjournals.com
- Rahman, Z. S., & Bristy, J. F. (2015). Macroeconomic Impact of Foreign Direct Investment: A Study on SAARC Countries. *European Journal of Business Management*, 7(34).
- Reddy, Y. V. (2002, May 18-24). India's Foreign Exchange Reserves: Policy, Status and Issues. *Economic and Political Weekly*, 37(20), 1906-1914. Retrieved from <http://www.jstor.org/stable/4412131>
- Reinhart, C. M., & Reinhart, V. R. (2008). *Capital Flows Bonanzas: An Encompassing View of the Past and Present*. Washington, DC: American Enterprise Institute.
- Reinhart, C., Guillermo, C., & Leiderman, L. (1996). Inflows of Capital to Developing Countries in the 1990s. *Journal of Economic Perspectives*, 10(2), 123-139. Retrieved from <http://mpira.ub.uni-muenchen.de/13707/>
- Saradhi, R. V., & Shashank, G. (2014). An Empirical Analysis of the Relationship Between Capital Flows and the Real Exchange Rate in India. *International Journal of Applied Management and Technology*, 13(1), 64-81.
- Sheefeni, J. P. (2016). The Impact of Bank-Specific Determinants on Commercial Bank's Liquidity in Namibia. *Business, Management and Economics Research*, 2(8), 155-162. Retrieved from <http://arpgweb.com/?ic=journal&journal=8&info=aims>

- Singh, J., Chadha, S., & Sharma, A. (2012). Role of Foreign Direct Investment in India: An Analytical Study. *International Journal of Engineering and Science*, 1(5), 34-42. Retrieved from www.researchinventy.com
- Talamo, G. (2011). Corporate Governance and Capital Flows. *The International Journal of Business in Society*, 11(3), 228-243. Retrieved from <http://dx.doi.org/10.1108/14720701111138661>
- UNCTAD. (2009). *UNCTAD Training Manual on Statistics for FDI and the Operations of TNCs*. Geneva: United Nations Publications .
- Wiboonchutikula, P., Kotrajaras, P., & Chaivichayachat, B. (2011). An Analysis of Thailand's Net Capital Inflows Surges After the 1997 Crises. *ASEAN Economic Bulletin*, 28(3), 281-314. Retrieved from <http://www.jstor.org/stable/41445395>
- Yasir, M., Shehzad, F., Ahmed, K., Sehrish, S., & Saleem, F. (2012). Relationship Among Exchange Rate, FDI and Foreign Exchange Reserves. *Interdisciplinary Journal of Contemporary Research in Business*, 4(5). Retrieved from ijcrb.webs.com
- Zeng, S. (2011). Foreign Exchange Reserves Demand Model Based on Chinese Government Utility Maximization and Analysis of Chinese Foreign Exchange Reserves. *Modern Economy*, 2, 354-370.