THE IMPACT OF CURRENCY FLUCTUATIONS ON FOREIGN DIRECT INVESTMENT (FDI) IN DEVELOPING COUNTRIES: THE PERSPECTIVE OF ZAMBIA

By

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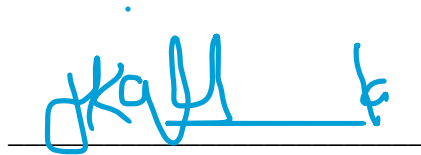**August 2021 Starters**

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Declaration

I do affirm that this research project is entirely my own. It is submitted as part of the Master's Degree in International Business requirements at ZCAS University, in collaboration with the University of Greenwich in the United Kingdom. This work has never been submitted in any form to any other university for any degree or examination.
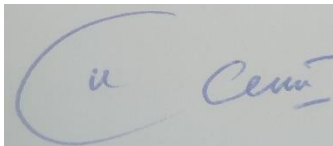
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Abstract

Over the last few decades, most scholarly writing has focused on foreign direct investment. The multiple benefits that come with Foreign Direct Investments in host nations, particularly developing ones, have been hotly disputed. In their desire for economic progress, several developing countries have devised schemes to attract foreign direct investment into their countries. The majority of research discusses money inflows, skill exchanges, and technical transfers, among other things. A literature search finds that much of the literature also thrusts on the factors that influence FDI inflows to these nations, and it's worth noting that little has been written about the relationship between currency exchange rates and FDI inflows. This inspired the author to conduct a study on the subject, namely how currency fluctuations affect FDI flows into Zambia. Secondary data was collected from the Bank of Zambia's archived publications on average FDI yearly flows and average yearly exchange rates, US Dollar to Zambian Kwacha, for 14 years from 2006 to 2019. Currency fluctuations and FDI flows into the countries have a positive association, according to the study. Investors have recognized inflation and economic growth as important motivators and demotivators. Policymakers should put less effort into managing exchange rate fluctuations, according to this study's recommendations, to attract more FDI to power the country's Vision 2030 pillars. Other FDI characteristics that have a major impact on flows, however, deserve further attention and research. With emerging sectors such as energy and growing interest from nations such as China in emerging markets in Africa, more research is needed to increase the knowledge on the main determinants of FDI for the country to achieve mid-income country status.

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Chapter One-Introduction

1.1 Background

Over the last decades, foreign direct investment (FDI) has been recognized as a major driver of globalization and economic growth, Countries have benefited from globalization through the transfers of technology, capital, skills, and knowledge between countries. While the exchange rate has been highlighted as a major element in FDI flows, and while the exchange rate has been included in certain research on FDI determinants, FDI also brings possibilities and financial problems all over the world. As a result, this chapter establishes the groundwork for the work to be done, including the study's background and the research challenge that arises from it. The aims are underlined, as well as the research topic, justification, methodologies used, and study contributions.

Zambia, like many other developing countries, has recognized the importance of FDI in its economic development. The ability of a developing country to absorb FDI spillover effects is essential. The transfer of direct technology, their spillover effects spillover, development of human capital, integration of international trade, and a business environment that is competitive are all favorable consequences of FDI on the host country's economy (OECD, 2002). However, the host country's macroeconomic environment must be attractive to lure foreign investment, and one of the most important aspects of the operational fiscal regime policy is the exchange rate of its currency against other foreign currencies. In the early 1990s, Zambia embarked on several reforms that resulted in the country transitioning from a highly regulated foreign exchange regime to a more liberalized foreign exchange rate market, in a bid to arrest the runaway inflation, high fiscal deficits, and large capital flights (Adam, 1999). The exchange rate has been unstable during the free regime, with fluctuations pitting the Zambian Kwacha against foreign currencies at historical lows and highs.

Zambia has long had bilateral and multilateral relationships with other countries, including those in the developing, emerging, and developed worlds. Since 1991, when the country transitioned from a one-party state to a democratic governance system, it has moved away from the Eastern bloc's socialist policies and a state-dominated market economy to an open market economy. The country implemented policies aimed at boosting the economy, which had been in freefall since the country gained independence from British colonial rule in 1964. The Zambian government liberalized the economy and created a favorable environment for Direct Foreign Investments to accelerate economic growth. Many state-owned and parastatal

businesses were sold to private investors. To monitor and supervise the investment field, the government established oversight bodies such as the Zambia Development Agency (ZDA). Zambia Privatization Agency (ZPA), among others.

Zambia has signed several bilateral agreements on trade, economic, and technical cooperation as a result of its bilateral relations with other countries. Zambia has seen a steady influx of FDI since 1991. Besides European and Western countries like the United States, the United Kingdom, Germany, and others, China has emerged as Zambia's most important development partner in recent years. To qualify this statement, China has established Multi-Facility Economic Zones (MFEZ) in Lusaka and on the Copperbelt, and the country has become one of the few African countries where the RMB, the Chinese national currency, is used in bilateral transactions (World Bank Group, 2016).

Currency Fluctuations

The current account balance of a recipient country can be used to gauge the strength of its currency. If the current account balance worsens, the recipient country's currency is likely to depreciate. Potential multinational investors may be wary of current account overdrafts since they can trigger inflation and currency rate swings. In this case, a decrease in the current account balance may result in a decrease in FDI inflow. The current account deficits of the host country may promote FDI flows if multinationals take advantage of this by obtaining more advantageous operating arrangements (Dhakal *et, al,* 2010).

A declining currency can either help or hurt foreign investors. For example, a declining currency could stimulate exports and bring benefits from resource-seeking FDI. When currencies devalue, foreign investors, on the other hand, may suffer losses as a result of the costs involved with avoiding transacting and translating losses. The continuous depreciation of the currency in the host country may act as a justification for investor decisions of whether to invest or not (Dhakal et, al, 2010).

The Zambian official currency is the Kwacha. The country's foreign exchange regime was not stable in the past decade, experiencing many adjustments and changes, aimed at stability, such as the floating exchange rate, fixed exchange rate, parallel exchange rates, Special Drawing Rights (SDR), foreign exchange auctioning to a liberalized exchange rate (Kalubi and Mukonda, 2021). The Zambian government introduced measures in 1991 to create stability in the foreign exchange regime, which led to the liberalization of foreign exchange controls and the establishment of a freely floating exchange rate regime governed by market forces.

(Mungule,2004) Because of Zambia's growing trade relationships with bilateral and multilateral partners, including China, any changes in the major convertible currencies and the Chinese RMB will have a big impact on FDI flows. The currency exchange rate is one of the factors that influences FDI flows to developing countries like Zambia. This is because some empirical literature claims that any changes or instability in the external value of the currency will affect the real value of the investment at both ends, i.e. at the time of investment and when earnings are transferred (Kalubi and Mukonda, 2021). This reflects the fact that FDIs are influenced by fluctuating exchange rates, which invariably serve as an incentive or a disincentive for foreign investment (Eregha, 2019). The issue of the exchange rate, and the achievement of a realistic and stable exchange rate, which is not only key to the facilitation of growth, but also critical in ensuring external balance and investment flows, is one of the contentious issues that pose challenges to macroeconomic policy pronouncements in developing countries. (Eregha, 2019).

FDI In Developing Countries

Direct knowledge transfer, technology spillover, generation of human capital, the integration of international trade, and a business competitive climate are all benefits of foreign direct investment (FDI) (OECD, 2002). To attract foreign investment, however, the host country's macroeconomic environment must be advantageous, and one of the major factors of the operational fiscal policy regime is the exchange rate of its currency against other convertible currencies (ALBA, *et, al*, 2010).

FDI is gradually being acknowledged as a very important aspect of an open and functional international economic system as a result of globalization, which has forced economies to progress towards a global village. Apart from the numerous advantages of FDI, FDI also functions as a non-debt-producing capital flow that can help to close resource shortages. Most developing countries are vying for FDI by enacting a slew of transformational reforms that will make their business environments more appealing to international investors. Most of this is achieved by the countries through the adaptation of various policies that promote the liberalization of trade regimes, the establishment of multipurpose economic zones, and the offer of inducements to foreign investors.

Many academic pieces of literature on the subject of FDI, tend to suggest that FDI gives rise to increased flows of capital injections and investments and technological transfers. They argue that FDI has the effect of bringing efficiencies to local enterprises, as they tend to promote

competition among foreign and local entrepreneurs, through technical skills and knowledge. The further assertion is that FDI will help to promote economic development and raise the standards of living of the people, by creating more industries, jobs, improving the education sector and raising the literacy levels in the country and improving the health sector, increasing the life expectancy of the people, creating a healthy and skilled Human Resource and reducing child mortality rates (UNCTAD, 2006).

Globalization and advancements in technology have made it less difficult for countries to trade with each other. This is so because many of the restrictive international trade has been abolished and a freer trade environment (FTE) was created. It is now easy for entrepreneurial organizations in different countries to set up businesses in other countries. This has resulted in a major rise in intra-regional and cross-border business transactions, an increase in capital flows for infrastructure and technological development, communications, easing the smooth and efficient flow of goods and services (Mulenga, 2019).

Zambia's economy was largely dependent on mineral exports since its independence from Britain in 1964. With the attainment of independence, the country adopted policies that were biased toward socialism. Many industries including the mines were nationalized, which marked the beginning of the economic decline. The systems adopted did not auger well for the economy as this soon was experienced through reduced foreign exchange earnings, rising inflationary levels, shortages of essential commodities, job losses, resulting in rising unemployment.

With the change of government from a one-party state to multiparty democracy in 1991, the Zambian government engaged in several reforms aimed at attracting FDI. The reforms paid dividends, as FDI became responsive to Zambia's liberalization policies and trends in world commodity prices. The country experienced increased levels of FDI flows more than in the prior years. The implementation of a privatization program contributed to this increase in FDI, as by 2002, out of 284 previously state-owned enterprises, 257 were sold to private and foreign investors (UNCTAD, 2006). There are many arguments in favor of FDI, suggesting a positive correlation between FDI and economic development; but how this interacts with a volatile exchange regime, is the subject of this study, especially in low-income nations like Zambia.

1.2 Problem Statement

Most governments around the world are thrusting on growing their economies and improving their people's living standards, mitigating the poverty levels, improve the education and health

sectors. This can be achieved through infrastructure and technological development, Research and Development (R&D) and innovation, the establishment of industrial and manufacturing bases. FDI has been perceived by many governments, especially in developing and low developed countries as the panacea for the economic ills and vehicle for accelerated economic growth through flows of funds for development, technological, and skills transfers. Through the FDI flows in the host country's economy it is believed that this will allow for the creation of employment, reskilling of workers through training and skills transfer and technology, and improvement of the local industries through competition and access to free trade areas brought about by globalization.

Much of the documentation on the subject of FDI assumes benefits to the recipient nations, suggesting a stronger positive association between FDI and economic growth. However, not much attention has been paid to the effects of currency fluctuations on FDI flows, especially in developing countries like Zambia. Much of the available literature is about the positive effects of FDI on developing countries' economies. In the Zambian context, some attempt has been made at ascertaining the determinants of FDI to the country, with little or no effort being made to adequately document the direct or indirect effect of exchange rate fluctuations on trade flows through the transmission mechanisms on the structure of employment, investment, and output.

Most governments have embarked on reforms to restructure their economies and create a favorable environment to attract FDI. Zambia transitioned from a state-controlled economy to a free market economy and soon with the country's abundant natural resources, the country opened up and became one of the desired investment destinations in Africa.

Zambia's macroeconomic conditions worsened in 2020, according to the Bank of Zambia's 2020 Foreign Private Investment and Investor Perceptions Survey Report, however, the investment atmosphere remained generally favorable. The regulatory environment in the country supports business operations and the stronger safeguarding of property rights. The World Bank rated Zambia among the top 5 Sub-Saharan Africa and 85th out of 190 countries in the Bank's Ease of Doing Business Report of 2020.

This study, therefore, has identified the gap in the literature available on the impact of currency fluctuation on FDI flows to Zambia and it is envisaged this study, will lay a foundation for further future studies on the subject.

1.3 Research Aims, Questions, and Objectives

Aim of the Research

This study aims to determine the impact of currency fluctuations on FDI flows in developing nations: A Zambian perspective.

Research Question

For this study work, the research question is **'' *What is the impact of Exchange Rate Fluctuations affecting FDI flows to Zambia.''***

Objectives of the Research

The study's goals are to determine how exchange rate fluctuations affect FDI flows and impact economic development in Zambia, as well as to make recommendations that will assist policymakers in Zambia in appreciating the importance of exchange rates when formulating fiscal policies that may intentionally influence the flow of FDI strategies and policy formulations.

1.4 Explanatory and Dependent Variables

The dependent variable is FDI, while the independent variable is currency Exchange Rate.

1.5 Research Contributions

Much of the research work on FDI, has concentrated on the positive benefits accrued to recipient countries, especially in the developed countries and the determinant of FDI flows, without much thrust on the effect of currency fluctuations on FDI flows, especially in the case of developing countries. It is hoped that through this work, knowledge may be provided to policy makers in Zambia to have an appreciation of the significance of currency exchange rates while formulating policies that may deliberately influence FDI flows.

Although the Zambian government's economic reforms since the 1990s have put the country on a trajectory of economic growth, it is not certain however that such changes have contributed to an increase in FDI flows into the country. FDI will be critical in the provision of not just the much-sought capital injections, but also the spillover effects that will assist other crucial economic sectors, allowing the country to realize its ambitious economic development goals outlined in Vision 2030. Policymakers must consequently have a better view of what effect currency exchange rate regimes might be in luring FDI and how well-informed monetary guidelines can further affect FDI stability to favorable levels of operations. So far studies

carried out in Zambia on FDI have been focused on the general determinants of FDI, it is hoped therefore that academic researchers on the subject of FDI in Zambia will find this work which is focused on the effects of currency fluctuations on FDI useful.

1.6 Research Design Overview

Research approach and method

To fulfil the objectives of the research and provide answers to the research question, this study will adopt a quantitative research method to collect, process, and analyze data. The quantitative research approach is suited for this study as it allows the author to collect data that can be easily measured, analyzed, and presented in understandable formats while also meeting the research objectives and addressing the research question. (Saunders, *et, al* 2009).

Collection and Analysis of Data

Secondary data on Zambia's currency rates and FDI flows will be gathered. The purpose of this study was to look at the trends in Zambian currency rates from the early 1990s to the current free exchange rate system. To capture these various exchange rate regimes, time-series data were collected from 1991 to 2021. Data on actual effective exchange rates and FDI flows were acquired from the Central Bank of Zambia data archives.

1.7 Layout of the Dissertation

The dissertation is organized into five sections, as follows:

The first chapter lays the summary of the research topic's concept, including the study objectives, aims, research questions, justification, and research contributions. The second chapter thrusts on acquiring literature studies from various published sources, such as books and journals, as well as internet articles on earlier work to expand knowledge and comprehension of the topic. Further, the theoretical and conceptual frameworks, which underpin existing theoretical perspectives on the effects of currency fluctuations on FDI flows are discussed. Chapter three **i**s the research methodology adopted in this study for collecting and analyzing data that is presented to draw inferences and help to answer the research questions. Chapter four forms the discussion and analysis of the research findings, while chapter five is the final part of the study where a conclusion and recommendation/s are made. This follows the works accomplished in the preceding chapters.

1.8 Chapter Summary

This dissertation's concepts and aspects have been explored in detail. The study background, objectives, research objectives, and significance of the study, as well as a summary of the problem statement, are all covered in this chapter. The next chapter is a literature review of other people's work on the subject.

Chapter Two- Literature Review

2.1Introduction

Chapter one discussed introduced the scope and put the whole research into context. Chapter two dwells on the literature review of the works previously undertaken concerning the topic under discussion. According to Walliman (2011), a literature review is necessary, as it enables the researcher to know and understand the current state of information in the chosen topic and be able to assess the information for its relevance, quality, controversies, and be able to identify the gaps in the knowledge. This saves the researcher a lot of time from producing information that is already available.

2.2 Theoretical Framework

The theories and theoretical frameworks are foundational for the development of information literacy instruction in the research work. It is critically important to identify theories for the research, as this will underpin the theoretical viewpoints on the impacts of exchange fluctuation on FDI. Some theories have been advanced to demonstrate the association between foreign exchange fluctuation, foreign trade, FDI, and economic growth.

In the late 1970s and early 1980s, theories concerning interconnectivity or FDI-exchange rate links began to develop (Kohlhagen 1977, and Cushman 1985). Blonigen (1977) and Froot and Stein (1977) were two significant theories (1991). Froot and Stein suggested that exchange rates on wealth had an impact on FDI, based on the imperfect market approach. They contended that when capital markets are flawed, external sources of funding become costlier than a company's internally generated cost of capital. This means a decline in a host currency will have a favorable impact on FDI flows, with the idea that this will immediately enhance foreign investors' wealth, and allow them to place higher bids for assets.

Blonigen (1997), on the other hand, used FDI purchases as an illustration of exchange rate effects because buying a targeted foreign firm can result in firm-specific assets. Blonigen's thesis implies that goods markets are segmented, with equal chances for overseas and local firms to purchase, but different chances to produce returns on assets in international markets. Following the purchase of a foreign firm, the profitability of the MNC's subsidiaries may improve, resulting in currency movements that alter associated asset valuations, and a decline of the host country's currency boosts FDI. Some of the theories on FDI-exchange rate relationships are examined further below.:

Neoclassical Trade Theory

According to neoclassical trade theory, capital transfers between countries are caused by differences in returns (Markus, 1995). The early neoclassical theory explained international capital movements, assuming that returns differed from country to country, leading to capital arbitrage and capital seeking the highest returns. According to Cockcroft and Riddell, future investment flows are essentially related to expected rates of return, investment safety, and a set of incentives to determine the extent and speed at which a company can cancel an investment (1991). Tax laws, laws governing investment, and broader macroeconomic policies all affect foreign direct investment.

Unbiased Expectations Hypothesis

Futures exchange rates are an unbiased forecast of future spot rates, according to the unbiased expectations hypothesis. This hypothesis assumes unpredictably high inflation. The result is a seal paradox. The Siegel paradox states that if two investors from different countries assume the same future exchange rate distribution, their expected profits will not be equal to each other. In addition, the unbiased expectations hypothesis argues that investors are risk-averse and exchange rates have little impact on future spot rates (Sercu-Uppal, 1995).

Keynesian Theory

Aggregate demand, according to Keynesian economics, is impacted by a variety of public and private economic actions, and it can behave erratically at times. The most important monetary and fiscal choices are made by the government. The study of total expenditure in the economy and its effects on production and inflation is known as Keynesian economics. The best approach to assure economic growth and stability is for the government to take an active role in the marketplace and monetary policy. As a result, most developed countries engage in active foreign policy meddling in an attempt to alter foreign governments' policies and create markets for their businesses to invest in.

Although development aid to least developed countries began in the 1950s during the colonial period, it was not vital to colonies or the relationship between richer and poorer countries (Riddell, 1992). As proved by Rostow, and Rosenstein-Rodan, Keynesian economics had an impact. Their main preoccupation was how to transform underdeveloped places and unproductive societies into vibrant, rising economies. Their main preoccupation was how to transform underdeveloped places and unproductive societies into vibrant, rising economies (Riddell, 1992). Aid has been provided to assist emerging nations in speeding up, therefore foreign capital's purpose is to aid the economy in transitioning and achieving long-term growth rather than directly raising living standards (Bhagwadti and Eckaus, 1970). Wealthier countries

had vested economic interests of investing in developing countries to increase their well-being. When the rate of interest is higher than capital productivity in wealthy countries and lower in developing countries, both countries will benefit. The diverting of untapped resources from wealthier countries to impoverished countries, that they cannot use owing to balance-of-payments constraints, both sides will benefit (Brandt Report, 1980).

International Fischer Effect (IFE) Theory

Foreign currencies with comparatively high-interest rates devalue, according to the International Fisher Effect (IFE), since high nominal interest rates reflect predicted inflation rates (Madura, 2000). According to this idea, changes in the spot exchange rate between two countries will tend to balance discrepancies in their nominal interest rates (Demirag and Goddard, 1994).

When speculators attack a currency, even if it is protected by the government, exchange rate management can be extremely costly and sometimes useless. High-interest rates will impede economic growth and hurt the economy by preventing capital outflows from foreign countries (Solnik, 2000). A variety of factors can cause variations in exchange rates. Changes in foreign exchange supply and demand, balance-of-payments problems, rising inflation, interest rates, national income, monetary supervision, changing prospects, and gossip are just a few examples (Khalwaty, 2000).

According to the IFE theory, the nominal interest differential, which ties exchange rate fluctuations to changes in interest and inflation rates, can be used to predict the future spot rate of exchange. Differences in projected inflation implicit in nominal interest rates are likely to affect the future spot rate of currency (Sundqvist, 2002).

Purchasing Power Parity (PPP)

The Purchasing Power Parity theory was first proposed by Swedish economist Gustav Cassel in 1918, and it was used to push for a new set of official exchange rates after World War One ended, allowing normal business relations to resume (Shapiro, 1992). This concept is based on the globally known law of one price. According to PPP, exchange-adjusted price levels should be the same all over the world, implying that a unit of the home currency should have the same purchasing power around the world. The theory predicts exchange rate movements based on shifting trade patterns caused by differing inflation rates between countries.

Exchange rates incline to shift to levels where the cost of items in each country is equal in the same currency, according to Kidwell et al. (2008). If the PPP holds for exchange rates, all things in all nations cost the same in the same currency, hence there are no net savings from

buying goods in other regions. Consumers will relocate their demand to where prices are lowest if international trade obstacles and transportation costs are removed, indicating that the price of the same basket of goods in different nations should be similar when measured in the same currency (Madura and Fox, 2011). When a country's currency is undervalued, goods produced there cost less than goods produced elsewhere, resulting in increased exports and decreased imports unless barriers to trade, costs of transportation, or the life of the product make it possible for people to purchase the same products in different places. It effectively extends the one-price regulation to the national level (Mishkin and Eakins, 2009).

When the rate of depreciation of the home currency to the foreign currency equals the difference in aggregate price inflation between the two nations in point, PPP is formed (Sarno and Taylor, 2002). This means that transportation expenses, tariffs, and quotas are all considered. Because deviations from PPP have persisted throughout history, it is not a complete theory of exchange rate determination (Shapiro, 1992).

According to the PPP hypothesis, the exchange rate will not remain constant but rather adjust to maintain purchasing power parity. To maintain parity between the two nations' new price indices, the percentage change in foreign currency should be adjusted. Due to the premise that all commodities are identical, as well as the cheap transportation costs and trade barriers, this theory cannot effectively explain exchange rates in two distinct countries. In ideal circumstances, exchange rates would have no impact on FDI because the profit gained from operating in a country where the currency depreciates would not be realized. There would be no need to invest elsewhere other than your home country because all costs would be the same (Mishkin and Eakins, 2009).

Interest Rate Parity (IRP)

In 1930, J. M. Keynes proposed the Interest Rate Parity theory. It was established on the law of one price, which asserts that when securities are listed in the same currency, identical securities should have the same price throughout all markets. It is described as a state of equilibrium in which market forces adjust interest rates and currency rates (Madura and Fox, 2011). This happens when the forward rate is greater than the spot rate by an amount equal to the interest differential between two countries at equilibrium.

When international financial markets are in equilibrium, it is an arbitrage condition that must hold. Non-residents and foreigners alike can buy assets in Zambia, which in this case refers to local and foreign bank deposits, in whatever country they want. When capital is mobile and

assets are perfect substitutes, both locals and foreigners will choose to hold solely local assets and will avoid foreign assets if the expected return on a local asset is higher than the expected return on a foreign asset (Mishkin and Eakins, 2009).

It is an arbitrage requirement that must be met when international financial markets are in equilibrium. Non-residents and foreigners alike can buy assets in Zambia, which refers to local and foreign bank deposits, in whatever country they choose. When capital is mobile and assets are perfect substitutes, both locals and foreigners will choose to hold solely local assets and will avoid holding foreign assets if the expected return on a local asset is higher than the expected return on a foreign asset. To compensate for the effects of other currencies, a currency with high inflation and interest rates can depreciate (Madura and Fox, 2011).

2.2.1 Key definitions and Concepts

Exchange Rates
The exchange rate is the price of one currency in terms of another currency. Exchange rates can be fixed or variable. The central banks of a country set fixed exchange rates, but market demand and supply determine floating exchange rates (The Economic Times 2022).
According to empirical research, exchange rate changes have the potential to induce economic distortions (Chipili, 2010). Zambia's exchange rate system was made up of a mix of fixed and floating rate regulations. Zambia adopted a fixed exchange rate system from 1964 to 1982, with adjustments in the period 1987 to 1991. This regime maintained periodic adjustments to the exchange rate system and other measures through the issuance of import licenses, rather than by state interventions in the currency rate market (Kalyalya 2007).

The Zambian Kwacha was tied to a basket of key trading partners' currencies between 1983 and 1985, with a monthly crawl of 1%. A flexible exchange rate regime was adopted as part of the early economic reforms in the early 1990s. Since Zambia adopted a flexible exchange rate policy, the Zambian Kwacha has fluctuated against foreign currencies, particularly the US Dollar (Chipili,2010).

Zambia has dealt with a variety of major trading currencies throughout the last 51 years, including the British Pound, US Dollar, Euro, and South African Rand. The Zambian Kwacha/US Dollar exchange rate underwent huge changes in 1995, 2006, and 2008 due to exogenous economic shocks. Supply shocks and banking crises, according to Chipili (2015), induced demand for foreign assets, improved external sector performance, and positive sentiments following the completion of the Highly Indebted Poor Countries Initiative

Completion Point (HIPC) and the Multilateral Debt Relief Initiative, which drew portfolio flows.

Foreign Direct Investment

FDI is a type of cross-border investment in which a foreign investor has a long-term stake in a foreign company and significant influence over it. When an investor from another economy controls 10% or more of the voting power in a corporation in one economy, there is a relationship. Because it creates strong and long-lasting linkages between economies, FDI is an important part of global economic integration. FDI aids economic development by encouraging technology transfer between countries, promoting international trade by opening up new markets and facilitating knowledge transfer between countries (OECD,2020).

Because it is supposed to offer a flood of benefits to the host country, including jobs, technology, and talent transfer, FDI has long been regarded as a source of economic growth, particularly in developing countries. FDI can also assist bridge resource gaps by acting as a non-debt-creating capital flow. As a result, most developing nations are competing with one another to attract substantial amounts of FDI by implementing various promotional policies such as trade liberalization, the establishment of special economic zones, and providing incentives to foreign investors.

Zambia, like most developing countries, has started reforms in recent decades in the hopes of accelerating economic progress by attracting international investment. Since Zambia's economy opened up in the 1990s, FDI appears to have responded to the country's liberalization policies and current changes in world commodities prices. Following that, FDI flows progressively rose, owing mostly to the adoption of a privatization program that had resulted in the privatization of many previously state-owned firms by 2002 (UNCTAD, 2006)

Although nominal FDI flows to Zambia have increased in recent years, Zambia's share of total FDI flows to the Sub-Saharan Africa (SSA) area remains minimal. In addition, the flows have been inconsistent and unreliable. Between 2000 and 2002, SSA accounted for 84 percent of total FDI flows to Africa. Only 19% was left for the remaining SSA countries to divide, with South Africa, Angola, and Nigeria accounting for 65 percent (World Bank, 2004). What factors influence FDI flows to Zambia?

2.2.2 Major Theories and Models

Using annual data from 1960 to 1997, Kosteletou and Liargovas (2000) employed a simultaneous equation model to analyze the relationship between FDI flows and Exchange

Rate Regime (ERR) for a large sample of industrial countries. They discovered that real exchange rate appreciation combined with a flexible ERR boosts FDI inflow in most nations.

Nawaz (2012) employed bounds testing or the autoregressive distributed lag (ARDL) approach to study the impact of the exchange rate on Pakistan's output level using time-series data from 1972 to 2010. In Pakistan, researchers established a bi-directional Granger association between the real exchange rate and real GDP. There was cointegration amongst the variables stated in the ARDL model in the longer term. Furthermore, the nominal exchange rate was found to be inversely connected to the output level in the long run. Depreciation, the inference was, resulted in larger supply-side cost expenditures in the form of increased capital imports. These findings suggested that nominal depreciation is not the greatest long-term strategy for increasing output.

From 1980 to 2012, Obeng *et al.* (2013), studied the association between Ghana's GDP growth rate and the exchange rate. The link between GDP growth rate and the exchange rate was established using Pearson's Product Moment Correlation Coefficient (PPMC), and the simple linear regression was estimated using OLS. The GDP growth rate and the rate of exchange were shown to have a substantial positive association. This means that as the exchange rate rises, the pace of GDP growth increases as well. The hypothesis that a high exchange rate boosts short-term economic development is supported by these facts. As a result, they encouraged policymakers to maintain long-term stability in monetary and fiscal policies.

2.2.3 Relationships Between Concepts

The exchange rate is the most crucial component in an open economy, according to Khan *et al.* (2012), and it has a direct impact on macroeconomic indicators like FDI and GDP. According to them, every increase in the exchange rate gave investors a competitive advantage in international trade. When a country's exchange rate rises, domestic export items become less expensive, increasing demand for exports as well as international demand for commodities, while imports decrease. They claim that this has an effect on FDI and, as a result, on the GDP of the country. Studies on the relationship between exchange rate fluctuation and FDI flows are ambiguous, and the findings are occasionally contradictory.

2.3 Empirical Review

The evidence suggesting an association between the exchange rate and FDI flows is contradictory. Among others, Caves (1989), and Blonigen (1997) discovered a significant relationship between dollar depreciation and higher FDI flows to the United States. Caves (1989) showed a considerable negative association between the level of the exchange rate and

FDI flows in the United States. However, according to Froot and Stein (1991), capital market inefficiencies incentivize companies to invest abroad if their local currency strengthens because their relative wealth increases, making external financing costlier than internal finance. As a result, the study discovered that a real depreciation of the US dollar enhanced the FDI influx into the US between 1973 and 1988. The correlation appeared stronger in industries where there was more opportunity for knowledge asymmetries, such as chemical and machinery manufacturing.

Stevens (1998), on the other hand, discovered poor empirical support for Froot and Stein's (1991) research premise, as well as indications of severe instability. The analysis discovered that the substantial association between the exchange rate and FDI flows evaporated for a major portion of the 1973–1988 period when the sample series was extended until 1991. Blonigen (1997) discovered that the real exchange rate between the Japanese yen and the United States dollar was positively related to the number of Japanese acquisitions (a proxy for FDI) in the United States, particularly in manufacturing industries with more firm-specific assets, corroborating Kogut and Chang's (1996) findings.

Liu's (2010) research of FDI flows to China from 18 main source nations from 1989 to 2006 showed a positive association between exchange rate and FDI. According to the survey, the majority of MNEs from Hong Kong and Taiwan have invested in China to cut labor costs. Despite this, Farrell et al. (2004) found mixed empirical evidence in their analysis of eight manufacturing industries in 15 nations. Using panel data analysis, they discovered a negative but small influence of exchange rate on FDI, while the conclusion was somewhat sensitive to country inclusion.

Meanwhile, Liu (2010) used data from 18 source nations from 1989 to 2006 to find that depreciation of the real exchange rate had a positive connection with FDI flows into China. Vijayakumar et al. (2010) discovered a substantial negative association between FDI and the real exchange rate for five fast-developing nations, namely Brazil, Russia, India, China, and South Africa, using annual observations from 1975 to 2007. According to the conclusions of Osinubi and Amaghionyeodiwe's (2009) study, real inward FDI and the exchange rate in Nigeria have a substantial positive association. This means that if the naira falls in value, actual inward FDI rises.

According to a study by Xing (2006), the depreciation of the yuan increased China's attractiveness in luring FDI from Japan, and FDI was elastic in its response to variations in the

real exchange rate. MNEs headquartered in the home country would find it difficult to export as domestic goods become less competitive, hence FDI is seen as a foreign currency rate exposure hedging technique. However, there are two crucial variables to consider in this scenario. The exchange rate must first and foremost be the real exchange rate, as it indicates competitiveness and economic exposure. Second, because time passes between the choice to invest and the change in the exchange rate unless the decision is based on short-term anticipation, the relationship between FDI and exchange rate cannot be simultaneous (Thomas and Grosse, 2001). Meanwhile, in his analysis, Pan (2003) discovered a negative but minor association between source and host country characteristics, including the currency rate, on FDI influx into China between 1984 and 1996. Because MNEs may not be able to reap profits in the short run, the findings suggested that FDI in emerging markets may be a long-term investment.

Potential overseas investors are concerned about exchange rate swings. Theoretical relationships and routes through which uncertainty affects investment have been identified in recent research (Abel and Eberly, 1994). The majority of these investigations have come up with no conclusive results. Uncertainty has varying effects on investment depending on the assumptions utilized. The size of the effect is also influenced by several other factors. As a result, the precise relationship between uncertainty and investment remains unknown from a theoretical standpoint.

2.4 Literature Gaps

The influence of currency fluctuation or changes on Foreign Direct Investment in Zambia is little documented. The majority of prior studies have concentrated on the factors that influence currency fluctuations and economic growth. In his papers, Mungule (2004) found that Zambia's real effective exchange rate is heavily influenced by real fundamentals, price differentials, and real shocks. According to Chipili (2013), variations in exchange rates have the potential to cause economic distortions.

Chipili (2015) went on to say that the Zambian Kwacha/US Dollar exchange rate fluctuated dramatically due to exogenous shocks in the economy, such as supply shocks and banking crises, which raised the demand for foreign assets, improvements in the external sector's performance, and optimistic views after the completion of the Highly Indebted Poor Countries Initiative Completion Point (HIPC) and the Multilateral Debt Relief Initiative.

Mukupa *et al*. (2018) investigated factors determining stochastic fluctuation of the Zambian currency, found a statistically significant association between the exchange rate of the Zambian currency and macro-economic indicators in their study, which was based on historical data. They also claimed that the Zambian foreign currency exchange rate is particularly vulnerable to external debt and net flows of foreign direct investment.

This paper, therefore, tries to bridge the gap in the literature about the impact of currency fluctuations can be on FDI flows and economic growth and serve as a framework for future research.

2.5 Conceptual Framework

Determinants of FDI

Because FDI involves real assets, investors are more likely to participate actively in the management of the assets they acquire. Many factors influence which countries are more appealing than others, and these characteristics might change over time. These factors have greatly aided the research of why certain countries are more successful in obtaining FDI than others. A great number of researches have been carried out to establish the factors that influence FDI, but no agreement has been achieved. The many approaches to FDI determinants, on the other hand, do not replace one another, but rather explain distinct parts of the same phenomenon (Kinuthia, 2010).

TABLE 1: Conceptual Framework

Independent Variables   **Dependent Variables**
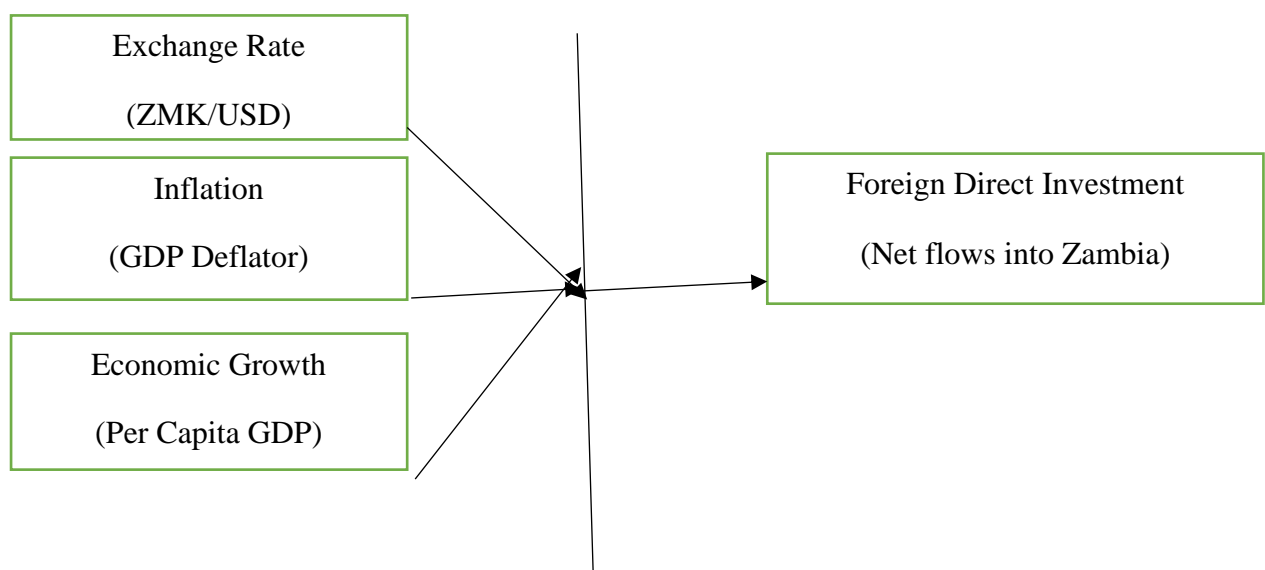
Dependent Variable(s)

Foreign Direct Investment (FDI)

The maximizing of wealth is the common goal of all businesses, and companies will seek ways to succeed and growth of shareholder value. According to Muema (2013), FDI is investments that are intended to be lasting and made outside of the investor's economic boundaries. The FDI recipient country will benefit from the cash and flow of technology that will aid in its development. When a country decides to invest in another, the benefits it hopes to gain must outweigh the hazards it will face. UNCTAD (2002) distinguishes three forms of FDI. Equity capital reinvested earnings, and other capital, which primarily consists of intercompany loans, are the three types of capital. FDIs provide new job prospects through establishing businesses, recruiting and educating locals in host nations, and transferring skills and technological know-how while also creating jobs. The study examines how changes in exchange rates affect this essential indicator of economic development.

Independent/Explanatory Variables

Exchange Rate

The currency rate has a significant influence on FDI. Asiedu was the first to argue that exchange rates will have a role in FDI location (2002). Asiedu suggested that the creation of multiple currency zones would attract foreign direct investment. Dunning believed that the higher the investment's fixed capital stake, the more vital it is to account for future exchange rate movement (Dunning, 1993). MNCs' location selections are influenced by exchange rate fluctuation, according to Goldberg (2011). According to another study, exchange rate risk plays a substantial role in explaining FDI (Gastanaga, *et, al*, 1998). Therefore, it is important to study how this important variable influence or impacts the flows of FDI in developing countries looked at from a Zambian perspective.

Inflation

Inflation is used as a proxy for macroeconomic and fiscal management success. Inflation is calculated using the consumer price index, which is a weighted average price of goods and services consumed (Nwankwo,2006). A high inflation rate reveals a country's high economic tensions and demonstrates the government's inability or desire to pursue a stable economic policy. A greater inflation rate may result in a drop in FDI in the host country if foreign investors are risk-averse or risk-neutral, as they will not risk the projected gains from their investments (Kadongo, 2011).

Foreign investors will demand a premium price to cover their exposure to inflation risks as long as there is uncertainty, which will reduce the volume of investment. As a result, the stability of the inflation rate is critical for encouraging investment (Gastanaga *et al*, 1998). According to Nwankwo (2006), Africa's macroeconomic policy shortcomings are inhibiting FDI. He contends that excessive budget deficits and inflationary pressures have resulted from reckless fiscal and monetary policies, raising local manufacturing costs, producing exchange rate instability, and making the region too hazardous for FDI. Macroeconomic instability has impeded the country's ability to attract FDI, as seen by growing inflation and large budget deficits (Onyeiwu and Shrestha, 2004).

Economic Growth

The growth hypothesis suggested by Lim (2000), according to Chakrabarti (2001), posits that a rapidly increasing economy has a higher profit potential than one that is growing slowly or not at all. According to Mishkin and Eakins (2009), growth has a significant positive impact on FDI. Other research, such as Gastanaga et al. (1998), Aoki (2007), and Asiedu (2002), have found varying degrees of association between economic growth and FDI, with some finding a substantial correlation and others finding a modest correlation.

2.6 Chapter Summary

Apart from the impact of the currency rate on FDI flows, few empirical studies on FDI in Zambia have focused much on its determinants. While some economists believe that information asymmetry affects the economy and that prospects are not the same across frontiers (Froot and Stein, 1989), exchange rate fluctuation causes ambiguity, which has been related to altering investments in recent research. Hence, understanding the influence of exchange rate fluctuation on the level of uncertainty surrounding capital flows into Zambia is crucial. The reader is guided through the research methods used in this study in the next chapter.

Chapter Three: Research Methodology

3.1 Introduction

Chapter Three is the methodology part of the research. In addition, the study will discuss and describe the adopted procedures to be used in answering the research questions. The techniques and methods for the collection and analysis of data are discussed in this chapter. The ethical, access, and limitation issues are also discussed.

3.2 Theoretical Framework of Methodology

There are few and inconsistent studies on the implications of exchange rate fluctuation on FDI. Although theoretical predictions are vague and actual evidence is rare, many studies have looked into the association between exchange rate fluctuation and aggregate investment. However, the literature suggests that investment is inversely associated with local currency appreciation and exchange rate fluctuation indexes, with the company and industry-specific variables also playing a role.

In theory, there is no distinct difference in the course of the association between real exchange rate fluctuations and FDI, according to Kosteletou and Liargovas (2000). In the literature, there are at least six competing models split into two categories: trade-integrated models and financial behavior models. The first group distinguishes between models of traded and nontraded items. The second group includes the fiscal approach to the balance of payments determination, multinational business strategic behavior, imperfect capital market theory, and relative labor cost theory.

The first model predicts that an exogenous inflow of capital will cause exchange rate appreciation or depreciation in a developing country that is a price taker, depending on whether the foreign exchange is used to finance domestic spending or capital accumulation in the traded and non-traded sectors. (Branson, 1997). The financial behavior model is the second model. Countries that liberalize their financial and capital markets expect an increase in total flows and outflows, according to the portfolio model. Thus, the first category of models shows that causation goes from FDI to the real exchange rate, whereas the second category of models suggests that causality runs in the opposite direction.

3.2.1 Research paradigm/philosophy

Data were obtained using structured self-administered questionnaires in both a qualitative and quantitative research design method (Saunders et, al,2009). This is necessary to comprehend the theoretical background and respond to the research questions. An interpretative research

paradigm, an inductive approach to theory verification, and a non-sampling intentional technique are all supported by this research strategy. To integrate the research data, make the analysis and presentation of the research results understandable, the qualitative and quantitative data gathering methods were examined for this study.

3.2.2 Inductive and deductive approaches

According to Trochim, there are two types of reasoning: inductive and deductive reasoning (2006). Deductive arguments are better represented by laws, norms, or other universally recognized notions, but inductive arguments are best articulated by experience or observation. According to Creswell and Clark (2007), the deductive researcher works from the top-down, from a theory through hypotheses to data to support or reject the theory. Inductive researchers, on the other hand, start from the beginning, generating wider themes and a theory that connects the concerns based on feedback from participants.

The deductive technique is common in quantitative research, but the inductive approach is common in qualitative research. Although there is some level of disagreement among academics on the best method to conduct research and gather data, the two methods are not mutually exclusive, and frequently treat the same issue in various ways.

Statistical analysis is often used in quantitative research to connect what is known with what can be learned through investigation. While gathering and evaluating data using quantitative methodologies, it is critical to understand the relationships between variables using descriptive or inferential statistics. To make conclusions and estimate parameters about groups of people, descriptive statistics are utilized (Trochim, 2006). Inferential statistics are derived from data from a sample and are based on descriptive statistics and assumptions that apply to the full population. In quantitative research, graphs, plots, charts, and tables can all be used to produce visual representations of data. Quantitative analysts make decisions based on logic, facts, and arguments (Trochim, 2006). In quantitative analysis, protocols are often employed to account for or foresee as many challenges to validity as possible. This study used a deductive and descriptive strategy because the data acquired in a quantitative research methodology may be reviewed and presented in forms that are easily understood and articulated to gain significance.

3.2.3 Time horizon

According to Saunders *et al.* (2009), time horizons in research are of two types: cross-sectional and longitudinal. Cross-sectional studies are those that look at a single phenomenon at a time, whereas longitudinal studies are those that require data to be collected on the same subjects

over time. This study is cross-sectional, as a longitudinal approach would be inappropriate due to time and cost constraints.

3.2.4 Research strategy

A research strategy is a plan of action devised by a researcher to address the research question (Saunders, *et, al*, 2009). The questions that need to be answered guide the research strategy that is used. The study is a cross-sectional study that collects, processes, and analyzes data using a quantitative research approach. This method is preferred because it allows the study to address the study's objectives and answer the research question. Graphs, charts, and statistics are some of the tools used in this approach (Saunders *et, al*,2009). This method is appropriate for this type of work because it aids the researcher in describing, presenting, and examining relationships derived from the data.

3.3 Empirical Aspects of Methodology

Autoregressive Distributed Lag (ARDL)

Using India as a case study, Durairaj and Nirmala (2012) explored the association between currency rate fluctuations and FDI using quarterly data from 1996 to 2010. They examined the short and long-run associations between these variables, as well as the issues that motivate investors to decide on investments, using the Autoregressive Distributed Lag (ARDL) bounds technique. The findings demonstrated an inverse link between exchange rate fluctuation and FDI, showing that luring FDI to India requires a stable, flexible exchange system.

The Johansen cointegration technique

Granger and Engle defined the cointegrating vector technique (1987). Two or more non-stationary time series data should be integrated in such a way that they cannot stray from a long-term equilibrium, according to their theory. The two economists argued against using linear regression to assess the relationship between numerous time series variables since detrending would not eliminate the problem of false correlation. Instead, they recommended looking for cointegration in non-stationary time series. They stated that if a relationship between two or more time-series variables with I (1) trends could be established, they could cointegrate them.

The Johansen test is used to see if several non-stationary time series data are cointegrating. In the Johansen test, there can be several cointegrating relationships. However, asymptotic properties apply since a tiny sample size would generate incorrect results (large sample size). The test avoids the complications that emerge when errors are carried forward to the next phase when it is used to find the cointegration of various time series.

Sharifi-Renani and Mirfatah (2012) used the Johansen cointegration technique to investigate the determinants of FDI in Iran from 1980 to 2006. They discovered that FDI is inversely related to exchange rate fluctuation and oil prices, while FDI is directly related to exchange rate fluctuation and trade openness.

Generalized Autoregressive Conditional Heteroskedasticity (GARCH)

GARCH was invented in 1986 by Dr. Tim Bollerslev, as a solution to the problem of forecasting asset price unpredictability. It was founded on economist Robert Engle's ground-breaking work in 1982 when he introduced the Autoregressive Conditional Heteroskedasticity (ARCH) model. His model believed that financial returns fluctuate over time but are autocorrelated. This can be seen in stock returns, for example, where periods of high fluctuation tend to cluster together. Susan Pozo (2001) used the GARCH Model to conclude that exchange rate fluctuation hurts the economy.

3.3.1 Sampling frame and sample size

The study's target demographic for data on foreign direct investment and exchange rates were all sectors of the Zambian economy. The data for FDI will be net annual flows to Zambia for every year under consideration, while the foreign exchange rates will be yearly averages. The study covered the 14 year period, 2006 to 2019. This time frame was chosen using real effective exchange rates and FDI data Bank of Zambia archived data.

3.3.2 Data Collection

Secondary sources were used to gather data for this study. This will aid in achieving the research's stated goals. In the Zambian context, secondary data on exchange rates and FDI flows were gathered from the Bank of Zambia's monthly, quarterly, and annual archived reports on exchange rate fluctuations and FDI flows to Zambia. Secondary data has the advantage of being already available and authenticated, as well as requiring less time and resources to collect, making it time and cost-effective (Saunders, *et, al*, 2009).

3.3.3 Data processing and analysis

Processing and analysis of data are essential components of any research project because they form the foundation for the answers to the research question. The methods chosen are based on the research questions and objectives. The goal of this study is to determine how exchange rate fluctuations affect FDI flows and economic growth. As a result, the relationship between the variables must be established. The data collected will be evaluated using regression and graphical analysis. Regression analysis is a statistical technique for determining the association

between variables. The graphical analysis will aid in the trend analysis for the chosen period. The SPSS tool will be used to analyze statistical data and to make it easier to interpret the results.

3.4 Reliability, Validity, and Generalisability of research findings

Reliability of Research refers to the degree to which research results are not only an acceptable reflection of the whole population but also remain stable over time (Golafshani 2003) The implication is that the research instrument is considered reliable if the results of a survey are repeated using a similar technique. In quantitative research, reliability refers to the processes and results being able to be replicated exactly. It refers to the accuracy of the test results or whether the study tests what it was designed to test (Golafshani, 2003). The proximal similarity paradigm, in which generalizability is defined by similarities in time, place, people, and other social circumstances, refers to the extent to which results from a particular study can be applied to another under similar theoretical conditions. Finfgeld-Connett and colleagues, 2010. This study examined the impact of exchange rate variations on FDI flows and economic development in Zambia.

3.5 Ethical and access issues

All information gathered for this project was treated with extreme caution. The research was carried out in a transparent, honest, and non-exaggerated manner. The researcher followed ethical guidelines, and where other authors' work was used, it was acknowledged. Throughout this project, objectivity and integrity were maintained.

Accessibility

Accessibility was not an issue for this study because the majority of the data needed was freely available on the Bank of Zambia's monthly, quarterly, and annually archived reports.

Research Ethics

Research ethics are the rules or values of behavior that influence moral decisions concerning people's behavior and relationships with others (Cooper and Schindler 2008). For this study, more importance was placed on the formulation and clarity of the research topic, as well as the design, access, data collection process, data storage and analysis, and all other processes that led to the final report.

3.6 Chapter Summary

The research methodology used during the study was discussed in this chapter, as well as the justification for the strategies chosen. The methods used for data collection, processing, and analysis were also discussed in the chapter. The chapter ended with a discussion of ethics and

accessibility concerns. The reader will be informed about the research findings in the following chapter.

Chapter Four: Findings, Analysis and Presentation

4.1 Introduction

Much of the search on a literature review about FDI in developing countries shows that most of the works carried out are mainly on the determinants of FDI in these countries. Much of the empirical and theoretical evidence has pointed to the availability of resources, trade openness, and infrastructure development as being the major determinants of FDI in developing countries such as Zambia. However, not much has been explored in the area of exchange rate variations and FDI. The thrust of this work is to examine the effect of currency fluctuation and FDI net flows to Zambia covering a Time series period of 14 years, from 2006 to 2019. The chapter will therefore give more details on the findings, analysis, and presentation of the results.

4.2 Findings

Descriptive Analysis

From the analysis it is observed that the flows to Zambia have not been steady, recording highs and lows between periods. The highest recorded was USD 2.10 Billion in the year 2013 and the lowest recorded of USD 0.41 in the year 2018. From the exchange rate data and FDI flows, it is evident that FDI flows are not purely determined by exchange rate fluctuations, but by other factors such as the economic state of the country, governance, stable business environment, and many other factors like the availability of natural and other resources. This is supported as can be deduced from the graphs depicting exchange rate movements mapped against FDI average flows over the period.

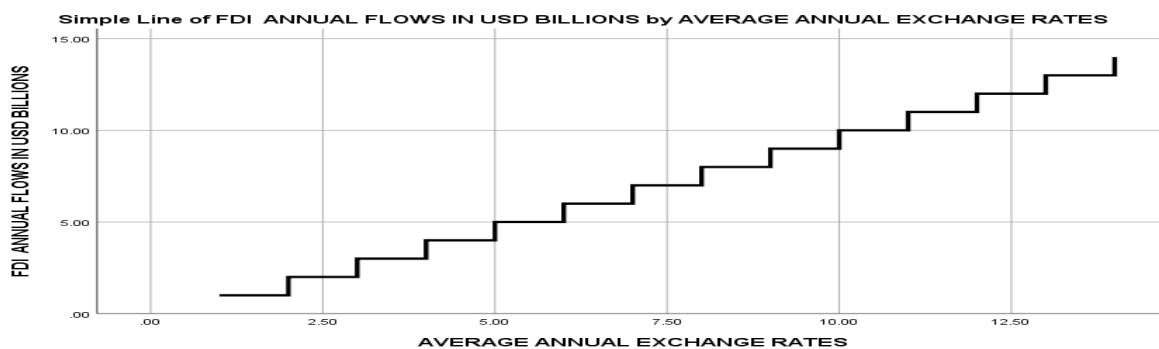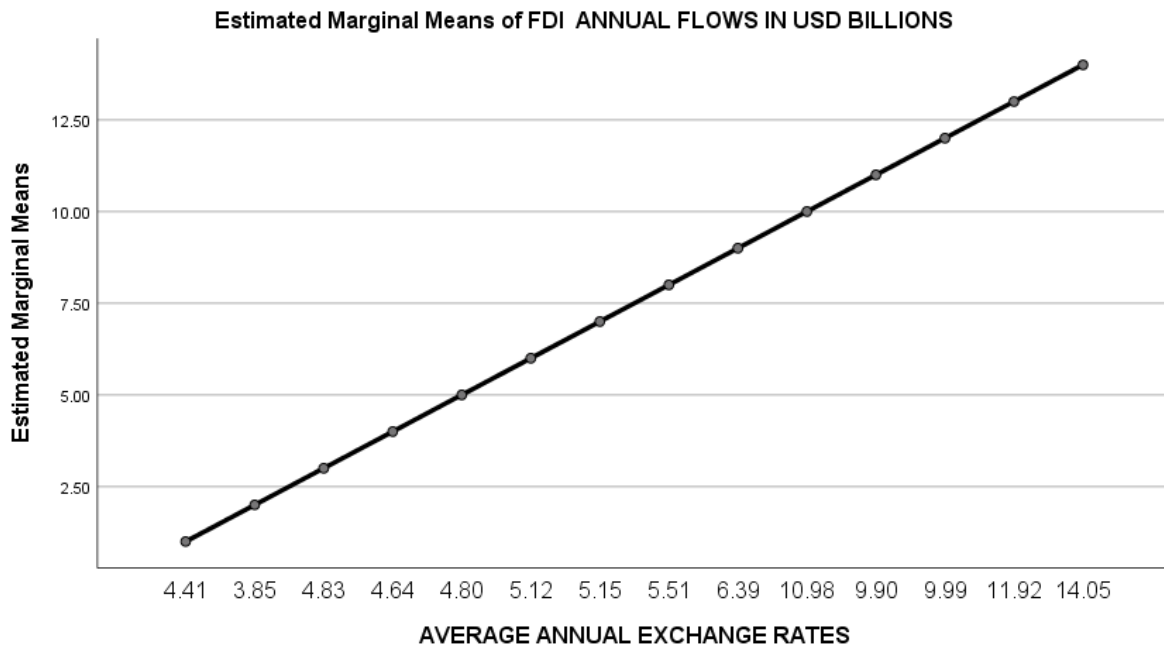**Table 1: Exchange Rate fluctuations against FDI net flows in USD Billions**

Simple Line of FDI ANNUAL FLOWS IN USD BILLIONS by AVERAGE ANNUAL EXCHANGE RATES

Table:2

Correlations

		FDI ANNUAL FLOWS IN USD BILLIONS	AVERAGE ANNUAL EXCHANGE RATES
FDI ANNUAL FLOWS IN USD BILLIONS	Pearson Correlation	1	1.000**
	Sig. (2-tailed)		.000
	N	14	14
AVERAGE ANNUAL EXCHANGE RATES	Pearson Correlation	1.000**	1
	Sig. (2-tailed)	.000	
	N	14	14

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2 above shows the correlation between exchange rates and FDI movements. The relationship is shown to be significant.

Estimated Marginal Means of FDI ANNUAL FLOWS IN USD BILLIONS

Simple Scatter with Fit Line of FDI ANNUAL FLOWS IN USD BILLIONS by AVERAGE ANNUAL EXCHANGE RATES
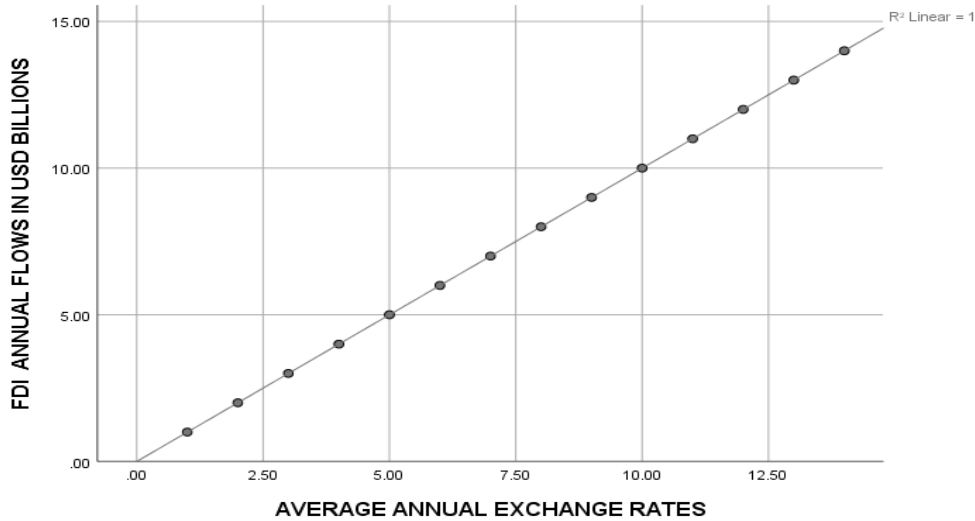
Effect of Exchange Rate on FDI Flows

From the study, it is evident that the exchange rate has a significant positive relationship with FDI flows into the country. Variations in the rate have had varying dimensions on the FDI. For example, the FDI flows were highest in 2013 at USD 2.10 Billion, when the Kwacha to USD rate was at USD1: ZMK 5.51 and dropped to USD 0.55 Billion when the rate deteriorated to USD1: ZMK 14.05 in 2018.
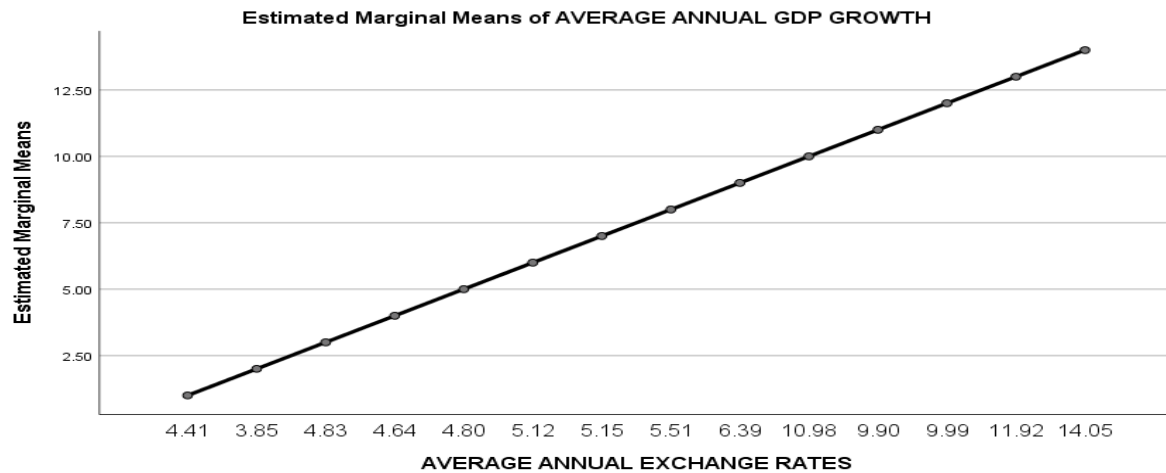
Inflation and GDP

Exchange rate fluctuation has an inflationary effect on GDP and FDI flows. High inflation poses a risk to investors, which in turn may lead to dwindling investments in the economy. The result is a decline in the growth rate. Zambian GDP was highest at 9.42% in 2007, when the exchange rate USD to ZMK was USD 1: ZMK 3.85 and to a low 2.35% when the USD/ZMK rate was USD1:14.05

Tests of Between-Subjects Effects

Dependent Variable: AVERAGE ANNUAL GDP GROWTH

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	227.500ª	13	17.500	.	.
Intercept	787.500	1	787.500	.	.
EXCHRATE	227.500	13	17.500	.	.
Error	.000	0	.		
Total	1015.000	14			
Corrected Total	227.500	13			

a. R Squared = 1.000 (Adjusted R Squared = .)

Estimated Marginal Means of AVERAGE ANNUAL GDP GROWTH

4.7 Chapter summary

This chapter analyzed and discussed the association between exchange rate fluctuations and FDI flows, the effect of exchange rate fluctuation on inflation, and GBP growth. The finding established a significant association between exchange rate fluctuation and FDI flows. The effect of exchange rate fluctuation on GPD growth is found to be positively related to the inflationary effect. However, it has been noted from the study that fluctuation of the exchange is not the only determinant of FDI flows into the country.

Chapter Five: Conclusions and Recommendations

5.1 Introduction

The conclusions and recommendations made in this chapter are based on the analytical findings of the last chapter. The research project's flaws are also highlighted, along with recommendations for future research to help a better appreciation of the drivers of FDI in Zambia and the relationship between exchange rates and FDI.

5.2 Conclusions

The effect of currency rate fluctuations on FDI in Zambia is weak, according to the findings of this study. We also find that, despite the fact the link between the two variables is positive, we conclude that an appreciation or decline of the local currency exchange rate will cause a slight increase in FDI flows. Other research methods, on the other hand, could be utilized in future studies to see if this result is valid.

Exchange Rate and FDI

Though exchange rate fluctuations are significantly correlated to FDI flows into the country, there are other significant factors, such as a stable political environment, vibrant economy, a good business environment, and other resources such as natural resources and cheap labor.

Inflation, GDP, and FDI

Exchange rate fluctuation has a spiral effect on inflation, causing foreign investors to hold on to their investments or claim a higher price to cushion their inflation risks, resulting in a decline in investment volume.

5.3 Practical/Managerial Implications of Findings/Recommendations

The association between exchange rate changes and their impact on FDI flows to Zambia was established in this study, and the impact was shown to be relatively weak. Other criteria that were not included in this study could, however, have a larger impact in luring foreign investments to Zambia. Factors such as an unstable political atmosphere, slowdown in the growth and development of major and rising sectors such as agriculture, tourism, and manufacturing could be among them. As a result, policymakers should thrust less on controlling exchange rates but on establishing policies that stimulate the other determinants of FDI. Policymakers must be aware of growing areas, such as energy, that may increase foreign capital flows as a result of their multiplier effect on other sectors. As a result, policymakers should concentrate on establishing infrastructure that will allow the sector's spillover effects to be fully realized. Recently, there has been a renewed push to find foreign investors to fund important projects in the energy sector, especially the untapped copious water resources in

many sections of the country. Cheap energy is required for foreigners to participate in industries such as manufacturing, agriculture, and tourism, thus the government can thrust on growing these sectors and investigating other energy sources to boost economic growth and encourage FDI.

Finally, other macroeconomic factors should be prioritized in designing policies targeted at fostering an investment-friendly climate in Zambia. Inflation and actual exchange rates are examples of this.

5.4 Study Limitations and Future Research direction

Study Limitations

The effect of time-lag data on exchange rate variations in terms of the time it takes for foreign investors to react to such changes was not considered in this study. Speculative investors are known for wanting to strike when they can earn the greatest money. A currency devaluation would cause investors to react to maximize their profits.

More macroeconomic indicators would have been included in this study to examine their relationships in the context of attracting FDI. To examine the influence of the exchange rate on foreign investment, this study was limited to net FDI flows. However, Zambia has a large number of foreign equity portfolio investments, which could have influenced the study's conclusions.

Future Research Direction

Future research might look at how exchange rate fluctuation affected FDI in Zambia under three different currency regimes: fixed exchange rates in the 1980s pegged exchange rates in the early 1990s, and the present floating exchange rate system. Future research should consider foreign investor reactions to see if exchange rate fluctuations are one of the elements driving foreign capital flows into the country. To establish the impact of other macroeconomic factors on FDI, more research is needed. These could include inflation and interest rates, as well as how they might affect FDI flows to Zambia, to provide insight into the favorable macroeconomic climate for economic growth through foreign capital flows. Other research has been directed to identify the determinants of FDI flows into Zambia generally; however, more studies are needed to evaluate the association between the factors and FDI, as well as the degree of their impact. Although this study focused on net foreign direct investments, foreign equity portfolio investment in Zambia has grown significantly. If future research included foreign equities portfolio investing, it would be fascinating to see if the outcomes were comparable.

Finally, because this work did not consider the impact of time-lag data on exchange rate fluctuations, it will be interesting to see if the findings and conclusions of this study can be replicated in future research.

5.5 Chapter Summary

The effect of currency rate variations on FDI in Zambia is significant, according to the findings of this study. The two variables are positively correlated and a swing of the exchange rate in either direction will cause a major shift in FDI flows to the country, as observed in the years 2013 and 2018 when FDI flows were highest at USD 2.10 Billion when the rate was USD1:ZMK5.51 and lowest at USD 0.55Billion when the rate was USD1: ZMK14.05. It is concluded that changes in local currency exchange rate variations cause significant movements in FDI flows. Other research methods, on the other hand, could be used in future studies to augment this result.

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APPENDICES

Appendix A: FDI Net Flows to Zambia/ GDP Growth & Exch. Rates.

Historical Data

(2006-2019)

YEAR	INFLOW USD$BN	% OF GDP	AVERAGE EXCHANGE RATES ZMK/USD
2019	0.55	2.35	14.05
2018	0.41	1.55	11.92
2017	1.11	4.28	9.99
2016	0.66	3.16	9.90
2015	1.58	7.45	10.98
2014	1.51	5.56	6.39
2013	2.10	7.49	5.51
2012	1.73	6.79	5.15
2011	1.11	4.73	5.12
2010	1.73	8.53	4.80
2009	0.69	4.53	4.64
2008	0.94	5.24	4.83
2007	1.32	9.42	3.85
2006	0.62	4.83	4.41

Source: Bank of Zambia Archives