ASSESSMENT OF FDI ON ECONOMIC GROWTH IN TANZANIA

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ASSESSMENT OF FDI ON ECONOMIC GROWTH IN TANZANIA

By

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A dissertation submitted in partial fulfilment of the requirements for the Degree of Master of Finance and Investment of the Institute of Accountancy Arusha

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CERTIFICATION

I, the undersigned certify that I have read and hereby recommend for acceptance by Institute of Accountancy the dissertation entitled: "*Assessment of FDI on Economic Growth in Tanzania*", in partial fulfilment of the requirements for the degree of Master of Science in Finance and Investment of the Institute of Accountancy Arusha

_____

CPA Richard Laswai

(Supervisor)

Date_____

DECLARATION

I, **Arold Mosses**, declare that this dissertation is my original work and that it has not been presented and will not be presented to any university for similar or any other degree award.

Signature _____

Date _____

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ABBREVIATIONS

ADF – Augmented Dickey-Fuller Test
BOT – Bank of Tanzania
CPI – Consumer Price Index
FDI – Foreign Direct Investment
GDP – Gross Domestic Product
MNCs – Multinational Corporations
MNEs – Multinational Enterprises
NBS – National Bureau of Statistics
OECD – Organisation for Economic Co-operation and Development
ODA – Overseas Development Assistance
R&D – Research and Development
TIC – Tanzania Investment Centre
UNCTAD – United Nations Conference on Trade and Development
VIF – Variance Inflation Factor
W.B. – World Bank
WIR – World Investment Report

ABSTRACT

Among the most striking characteristics of the global economy, today is Foreign Direct Investment (FDI). The goal of this study was to assess the economic growth of Tanzania through Foreign Direct Investment. Data obtained from the World Bank database, International Monetary Fund, Bank of Tanzania and Bureau of Statistics of Tanzania for this research; research based on time series data from 1998-2019. The data translated into a logarithmic form and the unit root test of the data performed to ensure the stationarity. From the estimated results, all factors encountered. Stationary, multicollinearity and heteroskedasticity not detected in all variables. They were suggesting that the estimates are reliable and can, therefore, be relevant. The results of the regression analysis revealed that the effects of Foreign Direct Investment and population on economic growth (GDP) are positive, which means that FDI and population contribute positively to Tanzania's economy. Results have shown that the exchange rate, Inflation and real interest rates have a negative effect on the economic growth of Tanzania, indicating that they are disadvantageous to the economic growth of Tanzania so that must be regulated; however, Tanzania should aim to maintain a single-digit inflation rate because increasing of Inflation is detrimental to the economy. The study suggested that Tanzania's Government needed to review investment policies that would enable FDI inflows to continue to have a positive impact on Tanzania's local economy. Focusing on keeping Inflation at a low rate is also crucial for the Government. Inflation-rate stability is an essential factor for the economy, and it is vital for Tanzania to take into account all the factors leading to a rise in general price levels, and to deal with them through appropriate policies.

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CHAPTER ONE
INTRODUCTION AND BACKGROUND TO THE PROBLEM

1.0 Introduction

Foreign direct investment (FDI) is a crucial part of an open and efficient global economic system and a significant driver of growth. However, the benefits of FDI do not accrue uniformly and evenly across countries, industries and local communities. National policies and international investment architecture need to draw FDI to many developed countries and to secure the full benefits of FDI for growth. The challenges primarily address host countries, which need to establish a transparent, broad, and effective enabling policy environment for investment and to build the human and institutional capacities to implement them (Obi, 2017).

Foreign direct investment generally referred to as FDI, refers to an investment made to gain a long-term or permanent interest in a company existing outside the investor's economy. The acquisition is direct since the investor who may be a foreign entity, corporation or group of entities wants to influence, operate, or have a significant effect on our foreign company. FDI is a significant source of foreign funding, which ensures that richer countries can obtain financing from those countries with small quantities of capital outside their national boundaries (Muntah et al., 2015)

With most FDI flows originating from Organisation for Economic Co-operation and Development (OECD) countries, developed countries can advance this agenda. Encouraging access for developing countries to foreign markets and know-how and ensure policy consistency for improvement more generally. Use overseas development assistance (ODA) to leverage public and private investment projects; allow non-OECD countries to further integrate into rules-based international investment frameworks; and vigorously promote the OECD Multinational Guidelines (Obi, 2017).

This study evaluates the impact of FDI, exchange rate, Inflation, Population, and the real interest rate on Tanzania's economic growth. The chapter includes background information illustrate the historical background of the issue, the problem statement that opens up the problem under

research, the study's key and necessary goals, the study's methodology, the study's significance, and, finally, its significance limitations and delimitations of the study.

1.1 Background of the Study

FDI is an investment made in another country by a company or entity based in one country in a company or entity. FDI vary significantly from indirect investments, such as portfolio flows, in which foreign investors invest in stocks listed on the stock exchange of a country. Entities that support directly typically have a significant degree of influence and control over the company's investment. Open economies with skilled labour and prospects for profitable growth tend to attract more massive foreign direct investment than closed, highly regulated economies.

Foreign Direct Investment (FDI) has recognised as one of the most significant external source extraction methods. As it can carry money, technology, management know-how, jobs, and access to new markets, FDI is also a driving force for economic growth. In recent decades, the study regarding the relationship between FDI and GDP growth has been fascinating, as many researchers have shown and discovered that these studies can help understand their effects on one another and their interaction (Shawa & Shen, 2013).

The importance of FDI in the process of improving the country's economy has currently been a scorching subject of discussion until recently. Most developed countries have made efforts mainly to attract FDI by creating a favourable environment for foreign investors as it has become one of the tools for bringing capital that is insufficient for most developing nations (Shawa & Shen, 2013). Developing countries are aware of the opportunities for growth associated with private capital inflows, so many have increasingly created the environment needed to attract international private capital flows. The liberalisation of their economies and adoption of an appropriate macroeconomic policy framework improve infrastructure, the delivery of public services, controlling Inflation and tackling problems of policies.

As a developing country, Tanzania is also aware of the growth of FDI-related opportunities. Significant steps have taken to liberalise the Tanzanian economy along market lines and to promote private investment from both international and domestic markets. The Government of

Tanzania embarked on a reform program starting in 1986 to abolish socialist economic controls and encourage more active private sector involvement in the economy. The program included a comprehensive policy package that reduced the budget deficit. It strengthened monetary control, dramatically depreciated the overvalued exchange rate, liberalised the trading system, abolished most price caps, relaxed food crop marketing restrictions, loosened interest rates and introduced a reform of the financial sector (Kabigiza, 2014).

Tanzania's Gross Domestic Product increased in 2019 by 8.2% relative to 2018 (World Bank, 2020). In 2019, the GDP figure was $63,177 million; of the 203 countries that were released, Tanzania is number 76 in the GDP ranking. In Tanzania, the absolute value of GDP in 2019 grew by $5.175 million. Tanzania's per capita GDP in 2019 was $1,122, $62 more than in 2018 when it was $1,060. With the rise in per capita GDP, it is essential to look back a few years and compare this data with that of 2009, when the per capita GDP of Tanzania was $695. If we order the countries according to their per capita GDP, Tanzania is in the place of 167 (World Bank, 2020). According to this parameter (AfDB, 2019), its population is among the poorest of the 196 countries that have reported their GDP.

To develop policies and policy structures to improve Tanzania's economy to achieve development targets and poverty eradication. Tanzanian policymakers and academics need to know which variable among the three in question causes another to be recognised and well implemented to identify the correct strategies that will have a significant impact on overall economic growth. To understand the financial performance of the country, especially Tanzania, it is, therefore, necessary to identify the interrelationship between FDI and GDP growth.

(Jilenga et al., 2016) highlighted that, The World Investment Report (WIR) released in 2012 indicates that the flow of foreign investment has increased in Tanzania. The study shows that by attracting USD 1.1 billion equal to (TZS 1.76 trillion), Tanzania became the top attracting FDI in the East African region over the past year. The report also highlighted, however, that Tanzania overtook Kenya's largest economy between June 2012, indicating the high economy in the country.

As a result of the favourable environment in the country due to peace and many investment opportunities available, trust among foreign investors in Tanzania. The same study pointed out

that Tanzania has drawn about 47% of all FDI flows to the five East African countries over the past three years. Moreover, UNCTAD's 2014 report indicates that Tanzania reported the highest FDI within the East African Community in 2013.

1.2 Statement of the research problem

FDI is generally considered by several international institutions, politicians, and economists, as a factor that enhances economic growth and the solution to the financial problems of developing countries (Mencinger, 2003). Global flows of FDI rose by 19 per cent in 2019. Cross-border investment in developed and evolution economies dropped rapidly, while development remained near zero in developing economies. With only a very modest recovery predicted for 2018, this is negative trend is a long-term concern for policymakers international, especially for developing countries, where global investment is indispensable for sustainable industrial development (World Investment Report UNCTAD 2018). All the countries in the world are always motivated for rapid economic growth. As a result, they are inviting so many more investment by allowing international stakeholders to invest in their country. Several factors help or hinder the economic growth of a nation. The elements identified as stimulants (World Investment Report UNCTAD, 2018) for a country's development are Large amounts of investment capital, Highly skilled labour, Advanced Technologies, Low tax rates, Stable and supportive social and political institutions, Favorable supervisory atmosphere and Well-developed transport and communication networks.

FDI can affect economic growth directly or indirectly. Among the expected benefit of FDI in the host, economies include achieving social-economic transformations and poverty reduction in general. Service FDIs may differ from one country to another and from time to time depending on the prevailing social, political, economic, and technological situation as well as on the legal and regulatory framework on the ground. As a developing country, Tanzania is also aware of the growth of FDI-related opportunities. Significant steps have taken to liberalise the Tanzanian economy along market lines and to promote private investment from both international and domestic markets. The Government of Tanzania embarked on a reform program starting in 1986 to abolish socialist economic controls and encourage more active private sector involvement in the economy. The program included a comprehensive policy package that reduced the budget deficit. It strengthened monetary control, dramatically depreciated the overvalued exchange rate,

liberalised the trading system, abolished most price caps, relaxed food crop marketing restrictions, loosened interest rates and introduced a reform of the financial sector (Kabigiza, 2014).

Foreign Direct Investment (FDI) has been the topic of discussion in both developing and developed countries over the last two decades. FDI has been seen as an essential source of investment financing, especially in emerging economies, too. As global economies expand and become increasingly accessible due to relaxation of international trade regulations, integration among countries has also increased as a result of global capital movements, which are usually facilitated by the activity of multinational enterprises (MNEs).

It really should be observed that there is a tremendous amount of research on very mixed results that explain the relationship between FDI and GDP growth. To the best of my knowledge only a few studies on the FDI, exchange rate, inflation rate, population growth and real exchange rate in the Tanzanian economy done,

1.3 Research Objective

1.3.1 General Objective

The study's objective is to assess the impact Foreign Direct Investment on Tanzania's economic growth (GDP)

1.3.2 Specific Objective

The research led by the specific goals that follow;

i. To examine the relationship between Foreign Direct Investment with Gross Domestic Product.

ii. To explore the relationship Exchange rate with Gross Domestic Product.

iii. To analyse the relationship Inflation rate with Gross Domestic Product.

1.4 Research Hypothesis

i. Foreign Direct Investment has a relationship with the Gross Domestic Product

ii. The exchange rate has a relationship with the Gross Domestic Product

iii. The inflation rate has a relationship with the Gross Domestic Product

1.5 Significance of the study

The study would seek to provide data on the degree to which FDI has an impact on our country's economic development. The study has been useful to the investment authority in Tanzania as it provides information on which sector is performing well in FDI inflows and which one needs to improve. This helps them review their policies and regulations to create an environment conducive to attracting more FDIs to the country. Increase awareness of the impact of FDIs on the Tanzanian economy among users. It is also the requirements for the successful completion of the Master of Science in Finance and Investments (MSc. FI) offered by the Institute of Accountancy Arusha (IAA).

1.6 Research limits and delimitations

The study dealt with secondary data that may cause or cause inherited errors when gathering such data, and the data also lack contextual information because other people are responsible for collecting the data, the errors diverge the research results. Lack of funds, the researcher privately funded, so he faced the challenges of getting adequate support from some research materials, and purchasing some papers such as pamphlets, newspapers, and internet packages are expensive. The researcher completed the study in a challenging situation. Also, the time to administer this research is so briefly for data collection in the identified industry sectors limits the researcher in making the final report so comprehensively.

The research concentrated on the effect of FDI on Tanzania's economic growth. The researcher collected secondary information through the process of content analysis. The content analysis consists of examining the contents of historical materials such as books, magazines, newspapers, and all other textual items that can be spoken or printed. In the study,

the researcher used secondary data from the Tanzania Investment Center (TIC), World Bank (W.B.), Bank of Tanzania (BOT), and the National Statistics Bureau.

1.7 Scope of the Study

The research examined assessed FDIs on economic growth, and in this case, Tanzania nationality only covered. The observations and conclusions of this study, therefore, not necessarily apply to other nations.

1.8 The layout of the report

There are five chapters in this document. Chapter one includes the aim of the research, statement of the problem, research hypothesis and objectives, scope, significance and rationale Chapter two covers both the theoretical and empirical analysis of the study's literature along with the theories, The conceptual framework and the hypothesis.

Chapter three covers the research methodologies, research design, study type, study area, test population, analytical units, variables, and their measurements, sample size and sampling techniques, data types and sources, data collection methods and data analysis methods.

Chapter four covers the presentation of findings as captured during the study work and a more in-depth discussion of the research findings concerning the study objectives and research questions.

Chapter five covers a summary of the finding from the study conclusion thereon. It includes the limitation of the study and areas of further research.

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This chapter deals with the study of various FDI and economic growth literature works. It includes a review of theoretical literature, analysis of scientific literature and conceptual context as well.

2.1 Concept of Economic Growth

Economic growth is an improvement in an economy's capacity to manufacture products and services from one period of time to the next. It can be calculated in nominal terms or real terms, the latter of which is inflation-adjusted. Aggregate economic growth historically calculated in terms of gross national product (GNP) or gross domestic product (GDP) (Romer, 2020)

Economic growth, on the other hand, is in a restricted form, an increase in national income per capita compared to development, and involves an analysis, particularly in quantitative terms, of this process, focusing on the functional relationships between endogenous variables; in a broader sense, on the functional relationships between endogenous variables; The increase in GDP, GNP and N.I., therefore, includes national wealth, including production capacity, expressed in absolute and relative terms, per capita, and also includes structural changes in the economy (Haller, 2012)

Reflecting substantial revenue growth over the past decade, the (World Bank, 2020) announced on July 1, 2020, that Tanzania's per capita gross national income (GNI) grew from $1,020 in 2018 to $1,080 in 2019, hitting the lower-middle-income status benchmark. The Tanzania Development Vision 2025, highlighted by high-quality livelihoods; peace, security, and unity; good governance; a well-educated and learning society; and a competitive economy capable of economic growth and mutual benefits, outlines the country's comprehensive vision of its development goals as a middle-income country in 2025. The increase in per capita GNI is impressive, but not sufficient to achieve these objectives. The secret to achieving these broad goals and improving the quality of life for all Tanzanians is investing in both human development and physical capital.

Most recently, the ongoing pandemic has seriously challenged the economy, especially in sectors dependent on global demand. Inflation has been low and steady, but growth in the gross domestic product (GDP) projected to slow down to 2.5% in 2020. Despite the nation's reopening for tourism

in June, tourism, a significant contributor to GDP growth, has decreased significantly and is expected to underperform during the July–October peak season. A deceleration is shown by leading measures of private domestic demand. Domestic credit growth declined from 8.9 per cent in the first half of 2019 to 6.9 per cent between January and June 2020. In the second quarter of 2020, imports of capital goods, a significant component of private investment, decreased by around 24 per cent year-over-year. Company forecasts over the next six months for sales and jobs are pessimistic. This year, political uncertainty over general elections could also lead to a pause in private investment (World Bank, 2020).

Tanzania ranks 141 out of 190 business-friendly economies, leading Rwanda, Kenya, and Uganda and Sub-Saharan peers including Zambia, Malawi, and Mozambique (World Bank, Doing Business 2020 Report, 2020). Reforms are required for a more favourable and predictable market climate, especially in terms of business regulation, in accordance with the Government's Regulatory Reform Blueprint to enhance the business environment.

2.2 Concept of FDI

FDI means that a large degree of control exercised by the investor on the Management of the company residing in the other economy. This investment includes both the initial transaction between the two companies and all subsequent transactions, both incorporated and unincorporated, among them and between international affiliates. Individuals, as well as business entities, can undertake FDI (World Investment Report UNCTAD, 2018). The control of 10% or more of the voting power of an enterprise in one economy by an investor in another economy is proof of such a relationship. As it generates secure and long-lasting relations between economies, FDI is a crucial component in international economic integration. FDI is an essential medium for technology transfer between countries, facilitates international trade through access to foreign markets, and can serve as a necessary means of economic growth. Inward and outward values for stocks, flows and profits, partner countries and industry and FDI restrictive are the indicators covered in this category (OECD, 2020).

2.3 Types of FDI

There are various forms of FDI; most common are Horizontal Foreign Direct Investment and Vertical Foreign Direct Investment.

2.3.1 Horizontal Foreign Direct Investment

Horizontal FDI is the form of investment in which a multinational corporation carries out the same business abroad as a company in its home country. It refers to the international manufacture of goods and services approximately equivalent to those manufactured by the company in its home market.

2.3.2 Vertical Foreign Direct Investment

Vertical FDI applies to multinationals that are geographically fragmenting the production process. Vertical FDIs are committed to exploiting lower cost of production to serve both the foreign and domestic markets. In this scenario, FDI can be beneficial to trade if part of the output in the host economy exported back to the home market.

2.4. Foreign Direct Investment in Tanzania

The World Investment Report (WIR) published in 2012 shows that the flow of foreign investment in Tanzania has increased. Tanzania has become the top attracting FDI in the East African region by attracting USD 1.1 billion (TZS 1.76 trillion). However, between June 2012, Tanzania had overtaken Kenya's largest economy, suggesting the country's strong economy (World Investment Report UNCTAD, 2013). Trust among foreign investors in Tanzania is a product of the favourable climate in the country due to peace and many investment opportunities available. The same study found that Tanzania has attracted about 47% of all FDI flows to the five East African countries over the last three years. Besides, the 2014 UNCTAD report shows that Tanzania registered the highest FDI in the East African Community in 2013.

FDI flows to the 33 African LDCs increased by 17 per cent to $12 billion in 2019, while FDI flows to East Africa decreased by 9 per cent to $7.8 billion in 2019. Flows to Tanzania increased by 5 per cent to $1.1 billion, up almost 20 per cent from Inflows to Uganda to $1.3 billion. As a result of the continued growth of large oil fields and foreign oil pipelines, as well as ventures in

construction, manufacturing and agriculture and inflows to Kenya, billions have fallen by 18% to $1.3 billion, despite many new projects in information technology and health care.

The tradition of political stability in Tanzania has attracted foreign direct investment. Government has admitted itself to improving the investment climate, including redrawing tax laws, floating the rate of exchange, licensing international banks, and setting up an investment development centre to eliminate bureaucracy. Tanzania has mineral reserves and a relatively unexplored tourism sector that could make it a competitive opportunity for foreign investment.

2.5 A theoretical and empirical review of the relevant literature

2.5.1 Theories of FDI

Over the years, the relationship between FDI and economic growth has received significant interest. Regardless of the critical role served by FDI in development in the economy, the theoretical relation between FDI and economic growth has not thoroughly understood by a wide range of policymakers.

The neoclassical growth model has shown that FDI can have a direct effect on economic growth through capital accumulation and the combination of new inputs and global technologies in the production function of the host country. As a result, the neoclassical growth model shows that FDI promotes economic growth by increasing the amount and efficiency of investment in the host country (Mahembe & Odhiambo, 2014)

2.5.2 The relationship between economic growth and FDI in the Neo-Classical theory

The Neo-classical Growth Theory is also known as, the Solow-Swan growth model or the exogenous-growth theory. It is an economic growth model that defines how stable economic growth occurs when three economic factors come into play; capital, labour, and technology. The theory implies that the accumulating of exogenous productive resources, like capital, technology, and labour force, drives economic growth. Using the exogenous model (Cobb & Douglas, 1928) developed empirical research on economic growth that employ the aggregate production function. It has shown that the accumulation of capital contributes directly to economic growth through this framework, in proportion to the share of capital in national output. Besides, economic growth relies on an increase in the labour force and technological development. FDI raises the capital stock in

the host country, according to this theory; and this, in turn, will influence economic development (Mahembe & Odhiambo, 2014)

Through the exogenous or neo-classical growth model, it has shown that through capital accumulation and the inclusion of new inputs and foreign technologies in the host country's production function, FDI can directly impact economic growth. Therefore, the neoclassical growth model shows that by increasing the amount and the efficiency of investment in the host country, FDI promotes economic growth (Mahembe & Odhiambo, 2014)

2.5.3 The relationship between economic growth and FDI in the endogenous growth model

The latest endogenous growth models bring long-term growth into account as a feature of technological change and thus provide a structure through which, through technology transfer, diffusion, and spillover effects, FDI will continually increase the rate of economic growth in the host country (Weinhold & Reichert, 2001)

Even though both the exogenous and endogenous theories of development claim that the formation of capital is a significant factor for economic growth, their treatment of technological advancement differs. The former treats technological advancement as exogenous to the model, while the latter claims that the rise in knowledge and innovation endogenously enhances technological advancement (Elboiashi, 2011). In addition to the accumulation of human resources, FDI by MNCs expected to introduce research and development which generates positive or negative growth spill-overs that would influence the companies of the host country and the economy (Baro & Sala-I-Martin, 1995). It presumed that these growth factors, or FDI spill-overs, emerge from tangible spending on capital, human capital, or research and development.

2.6 Empirical Literature Review

Most of this research work carried out from the perspective of Tanzania. The essential empirical studies have been objectively reviewed and further examined to draw some substantial conclusions and recommendations. Several reports have presented on foreign direct investment, exchange rates, Inflation, real interest rates and economic growth.

Concerning the impact of FDI and Inflation on economic growth in Tanzania (Luvanda & Shitundu, 2000) concluded that Inflation was unfavourable to economic growth in Tanzania. Nevertheless, the degree of responsiveness of the GDP growth rate to shifts in general price levels has not demonstrated. This study explored the effect of FDI on Tanzania's economic growth by showing the degree of responsiveness of GDP adjustment due to changes in Tanzania's general price levels and thus filling the current knowledge gap.

A beneficial impact on economic development is the inflow of foreign direct investment. Foreign direct investment directly affects economic growth, but through crowding in domestic investment, it does not indirectly impact economic growth. Moreover, two unidirectional causalities have been established in Taiwan, ranging from economic development to domestic capital and from domestic capital to foreign direct investment (Chang, 2005)

An independent study on FDI and stock market development in the country had a positive effect on economic and stock market growth. The review included market capitalisation data as a percentage of local GDP and Ghana cedi and dollar exchanges and the net influx of FDI quarters between 1991 and 2006. The study revealed that the relationship between FDI and the Ghanaian stock market would be advantageous for the country in the long run, with the use of multivariate co-integration analysis and the Vector Error Correction Model (Adam & Tweneboah, 2009).

In the short and long term, there are positive ties between foreign direct investment and economic growth, and between financial development and economic growth. The result also highlights the significance of Malaysian absorption potential in transferring to higher economic growth the benefits embodied in foreign direct investment inflows (Choong & Lim, 2009).

To examine the long-term relationship between FDI inflows and economic growth from 1980 to 2010 in Saudi Arabia (Al-Khathlan, 2013) used co-integration techniques. He found a significant positive relationship with economic growth.

(Kabigiza, 2014) reported that the findings find that the more FDI, the more economic growth, the more FDI, the more has contributed significantly to the economic growth in Tanzania. It is,

therefore, necessary for the Tanzanian Government to review investment policies that will enable FDI inflows to continue to have a positive impact on Tanzania's local economy. In Tanzania, FDI is a significant predictor of globalisation.

(Islam, 2014) analysed the influence of FDI on the economy of Bangladesh using secondary data for the years 1996 to 2010. He argues that Bangladesh's FDI plays a vital role in achieving economic growth predicted. The findings indicate a strong link between FDI and GDP, exports and private investment.

(Kubatko et al., 2014) analysed the effect of foreign direct investment on the growth of 26 post-communist transition economies and indicated that FDI had an impact on the development of those economies from 1998 to 2010.

Likewise, (Muntah et al., 2015) analysed the effect of Foreign Direct Investment on Pakistan's economic development. Their results show that FDI positively linked to GDP. They conclude that Pakistan should adopt FDI ventures for the promotion of economic growth.

The empirical findings indicate that both domestic private investment and FDI are having a significant impact on Tanzania's economic development. The causality tests also show the existence of a long-term, unidirectional causal relationship between FDI and economic growth, spanning from domestic private investment to economic growth and bi-directional causation. Moreover, the paper confirms that it is more successful than FDI for domestic private investment. Furthermore, the report demonstrates that it is more successful than FDI for domestic private investment (Manamba & Massawe, 2016)

The empirical findings indicate that both domestic private investment and FDI are having a significant impact on Tanzania's economic development. The causality tests also show the existence of a long-term, unidirectional causal relationship between FDI and economic growth, spanning from domestic private investment to economic growth and bi-directional causation. Moreover, the paper confirms that it is more successful than FDI for domestic private investment.

Furthermore, the article demonstrates that it is more successful than FDI for domestic private investment.

However, a study by (Saqib et al., 2013) on the effect of foreign direct investment on Pakistan's economic growth shows that the economic output of Pakistan is negatively affected by foreign investment, while its domestic investment has benefited its economy. Therefore argued that the country's economy will benefit from domestic investment and that reliance on foreign investment should remain minimal. In this regard, it seems that the repatriation of income back to the investor nation dilutes much of the advantages of foreign investment. The limited ability of the host country to disseminate the transfer of information and technology for further growth may also explain this.

(Alfaro et al., 2004) investigates whether FDI can be more effectively used by countries with more substantial financial structures using cross-country data between 1975 and 1995, empirical research reveals that FDI alone plays a tentative role in contributing to economic development. Countries with well-developed capital markets, however, benefit substantially from FDI. The findings are robust in terms of various measures relating to the development of the stock market, the inclusion of other determinants of economic growth and the consideration of endogeneity.

(Jilenga et al., 2016) explores the impact of public debt and FDI on Tanzania's economic growth time-series data analysis of secondary for the timeframe from 1971 to 2011 and concluded that FDI had an adverse effect on economic growth, which would lead to a decrease in economic growth due to a rise in FDI.

2.6 Conceptual Framework

The theoretical framework used in the analysis focused on the relationship between Foreign Direct Investment (FDI) and the effect on Tanzania's economic growth (GDP). Five independent variables included in the model, namely FDI, exchange rate, inflation (CPI), population, real interest rate and one dependent Gross Domestic Product (GDP) variable.

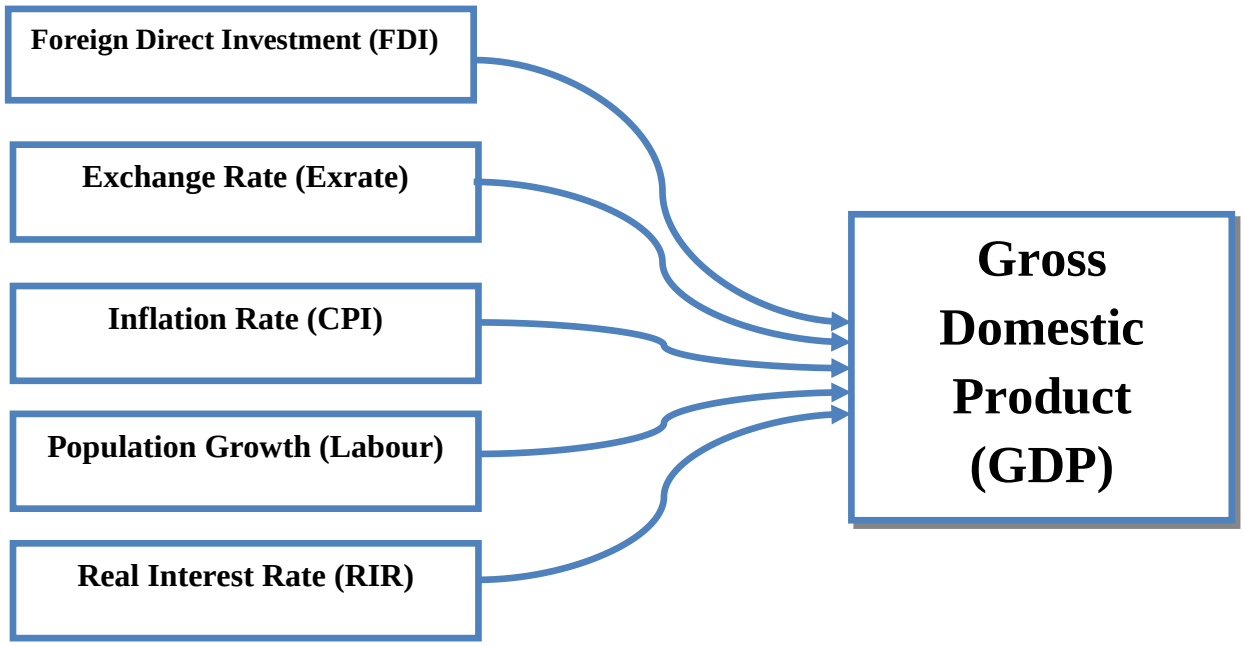

Figure 2.1 Conceptual framework

Source: *Research findings, 2020*

2.7 Research Gap

Several studies conducted to examine FDI in both developed and developing countries and its effect on economic growth. Empirical studies of the impact of FDI on growth are concerned with the overall effect either on development (or net welfare) or with specific aspects of the FDI impact on employment, technology, trade, entrepreneurship, and other areas of the economy, such as infrastructures, education, and health. Thus, the effects of FDI on economic growth remains unclear. The researcher uses current statistics to shed some light on the understanding of this study. It is, therefore, necessary to assess FDI on the economic growth in Tanzania.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

The chapter explains the techniques and procedures used in the analysis by the researcher. This involved choosing a sample for testing, sampling techniques, and methods for collecting data. Because the effect of FDI, real interest rate, exchange rate, population, and Inflation on economic growth cannot be accurately measured and these five independent variables reflect a complex set of attributes that differ over time, secondary data collection methodology, data analysis, and data presentation conducted to achieve the research goals.

3.1 Research Design

This statistical comparative study design, the data used are secondary time series data from documented publications, and other documentary reviews, the rationale of using secondary data in this study save time and money and use the information obtained in triangulating the findings from the survey. The study test the impact of FDI, exchange rate, Inflation rate, population and the real interest rate on economic growth in Tanzania. The samples used in this study used time-series data from the year 1998 until 2019

3.2 Research Area

This work analysed the relationship between the dependent variable (GDP) and independent variables, foreign direct investment, exchange rate, inflation rate, population, real interest rate, the research focuses on Tanzania.

3.3 Research Population, sample and sampling methods

3.3.1 Research Population

Secondary data from public sources used due to the nature of this analysis. For FDI inflows, trends in GDP and Inflation, exchange rate, real interest rate and population collected from official publication reports and other documentary analyses from UNCTAD, Bank of Tanzania (BOT) and National Bureau of Statistics (NBS), World Investment Reports, IMF, magazines, newspapers,

and the Internet as well. The study period ranges from 1998 to 2019. Such reports are published annually and provide FDI and inflation rates, interest rates, exchange rate, population, and GDP statistics.

3.3.2 Research Sample and Sampling Methods

A purposeful sampling technique is a process used to collect the sample. The goal examines the FDI, exchange rate, Population and real interest rate, data from previous years to see how they impact economic growth.

3.3.3 Sample Size

The sample size consists of 22 years, foreign direct investment, inflation rate, Population, interest rate, exchange rate, and GDP. The selection criteria based on data available in Tanzania Investment Reports, UNCTAD's DataStream, World Bank, Bank of Tanzania, and the National Statistics Bureau.

3.4 Data collection methods

The data collection process in this analysis based on secondary data. Secondary data is the name given to data used for reasons other than those for which it was initially collected. Secondary data typically used depending on the study's design and information needs.

3.5 Data analysis methods

To achieve a meaningful relationship between variables, the data obtained are coded, processed, and analysed using quantitative techniques. The available data examined through the application of regression. For statistics, when the emphasis is on the relationship between the dependent and independent variables, regression analysis includes several methods for modelling and evaluating many variables. The researcher uses the STATA and Microsoft Excel programs to conduct this research to find the best results in the analysis of the data obtained. Tables and diagrams for straightforward interpretation used to present information.

CHAPTER FOUR

PRESENTATION AND DISCUSSION OF FINDINGS

4.0 Introduction

The estimated results and data analysis for the assessment of Foreign Direct Investment for Economic Growth in Tanzania discussed in this chapter. The review followed the objectives set out above. The study centred on the five independent variables (FDI, exchange rate, Inflation, Population, and real interest rate) and their effect on a single dependent variable (GDP). Logical description, contrast, and clarification of the estimated results for 1998-2019 included in the data review.

4.1 Estimated Model

To learn more about the relationship between FDI, exchange rate, Inflation, Population, and Tanzania's real interest rate and GDP, we use the linear multiple regression model;

$$RGDP = f(FDI_{infl}, Exrate, CPI, Labour, RIR, \varepsilon)$$

Where:

RGDP = Real GDP growth annual percentage

F = Function of

FDI_infl = FDI inflow

Exrate = Exchange rate

CPI = Inflation, consumer prices annual percentage

Labour = Population growth annual percentage

RIR = Real interest rate percentage

E = Error term

FDI, exchange rate, Inflation, Population, and the real interest rate has considered being the function of GDP

$$RGDP = \beta_0 + \beta_1 FDI\_infl + \beta_2 Exrate + \beta_3 CPI + \beta_4 Labour + \beta_5 RIR \quad \text{..... (i)}$$

4.2 Transformation of variables

The researcher assessed the stationarity of the variables in this model by transforming the variables before performing a unit root test (stationary time series data test). All five variables in our model (FDI, exchange rate, Inflation, Population, and real interest rate) transformed in logarithmic form.

The Transformed Model is as below:

$$lnRGDP = \beta_0 + \beta_1 lnFDI_{infl} + \beta_2 lnExrate + \beta_3 CPI + \beta_4 lnLabour + \beta_5 lnRIR + \varepsilon$$

4.3 Unit Root test for stationary of data

For econometrics analysis, when time-series data is applied, the preliminary statistical step in to test the relationship. Unit root tests provide information about the stationarity of the data. Non-stationarity data would contain unit-roots. Results derived from the regression models produce spurious results if we use the data without checking their stationarity properties (Datta & Kumar, 2011).

To test the presence of the roots of the unit and to evaluate the degree of differentiation we used ADF that is Augmented Dickey-Fuller Test (1979)

4.3.1 ADF unit root test for RGDP and trend for RGDP

(a) ADF test for GDP

Table 4.1 Table Augmented Dickey-Fuller results for GDP

```
. dfuller rgdp, lags(0)

Dickey-Fuller test for unit root                   Number of obs   =        21

                                 ------------ Interpolated Dickey-Fuller ------------
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)            -3.900           -3.750            -3.000           -2.630
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0020
```

***Source**: Research findings, 2020*

Results: from table 4.1 show GDP is stationary at the level that has no constant term lag (0) since our test statistic computed Z(t) exceeds the D.F. Z(t) at in absolute terms at the critical value of 5%. |-3.900|>|-3.000| hence we reject the null hypothesis and accept the alternative hypothesis that our GDP variable is stationary therefore we can use for other estimations.

(b) **GPD annual percentage trends**

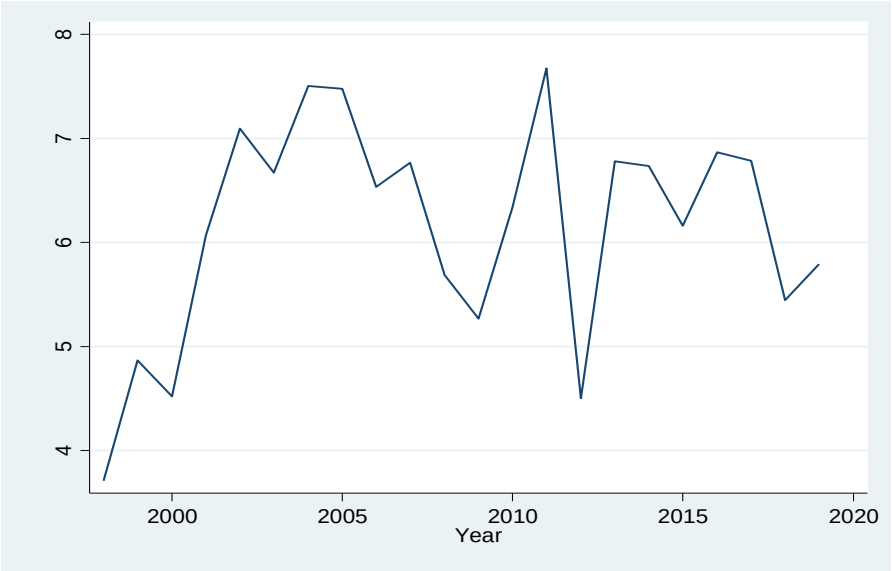

Figure 4.1 GDP Trends for years 1998 - 2019

Source: *Research findings, 2020*

Results: From figure 4.1 we can observe that the GDP of Tanzania began to pick up in the mid-1990s this is due to privatisation which was introduced in early 1990s as the result the general utilisation and industrialisation rose to lead to more investment and promoting GDP. In 2013, the GDP annual percentage grew to 6.78% compared to 4.5% in 2012. The development led by improved transport and communication infrastructures; improved industrial production following government efforts to ensure a reliable supply of electricity; and the use of alternative sources of electricity for industrial production. Moreover, the growth was due to improved agriculture following favourable weather conditions, as well as government efforts to provide timely subsidies for improved seeds and fertilisers (URT, 2013)

4.3.2 ADF unit root test for FDI inflows and trend for FDI inflows

(a) ADF unit root test for FDI

Table 4.2 Table Augmented Dickey-Fuller results for FDI inflows

```
. dfuller fdi_infl, lags(0)

Dickey-Fuller test for unit root                   Number of obs   =        21

                                 ———— Interpolated Dickey-Fuller ————
                 Test         1% Critical       5% Critical      10% Critical
               Statistic         Value             Value            Value
——————————————————————————————————————————————————————————————————————————
 Z(t)            -3.738           -3.750            -3.000           -2.630
——————————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.0036
```

Source: *Research findings, 2020*

Results: from table 4.2 show FDI is stationary at the level that has no constant term lag (0) since our test statistic computed Z(t) exceeds the D.F. Z(t) at in absolute terms at the critical value of 5%. |-3.738|>|-3.000| hence we reject the null hypothesis and accept the alternative hypothesis that our FDI variable is stationary therefore we can use for other estimations.

(b) Trend for FDI Inflows

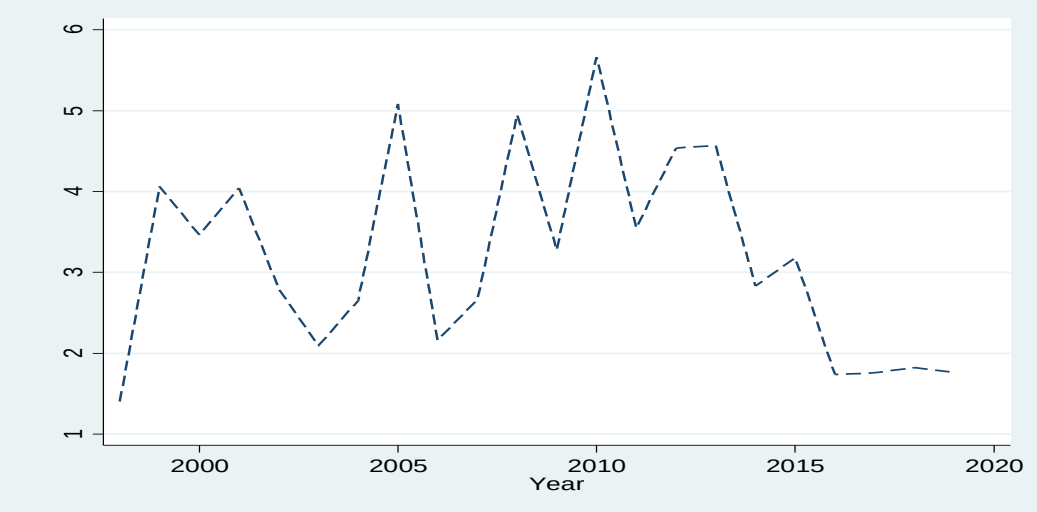

Figure 4.2 FDI Trends for years 1998 – 2019

Source: *Research findings, 2020*

Results: FDI flows into Tanzania was very minimal, and they remained below 3.7% almost for the entire 1990s. However, the flows increased rapidly from 1999, whereby they accelerated to 4.8% (see Figure 4.2). This increase is due to concerted efforts by the Government which include reforms on trade, exchange rate, monetary policies, promotion of private investment, good governance, improved infrastructure and social services which have contributed to favourable investment environment in the country.

(UNCTAD, 2018) FDI flows to Africa continued to slide, reaching $42 billion, down 21 per cent from 2016. The decline concentrated in the broader commodity exporters.

4.3.3 ADF unit root test for the exchange rate and trend for exchange rate

(a) **ADF unit root test for exchange rate**

Table 4.3 ADF unit root test for exchange rate

```
. dfuller exrate, lags(1)

Augmented Dickey-Fuller test for unit root         Number of obs   =        20

                                 ———— Interpolated Dickey-Fuller ————
               Test         1% Critical       5% Critical      10% Critical
             Statistic           Value             Value            Value
———————————————————————————————————————————————————————————————————————
 Z(t)         -1.227            -3.750            -3.000           -2.630
———————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.6618
```

Source: *Research findings, 2020*

Results: from table 4.3 show exchange rate is not stationary at the level that has no constant term lag (1) since our test statistic computed Z(t) does not exceed the D.F. Z(t) at in absolute terms at the critical value of 5%. |-1.227|<|-3.000| hence we accept the null hypothesis and reject the alternative hypothesis that our exchange rate variable is not stationary. Therefore we can not use for other estimations; alternatively, we ran a Cumulative Sum (CUSUM) to test the constancy of the coefficients in a model.

(b) Trend for exchange rate

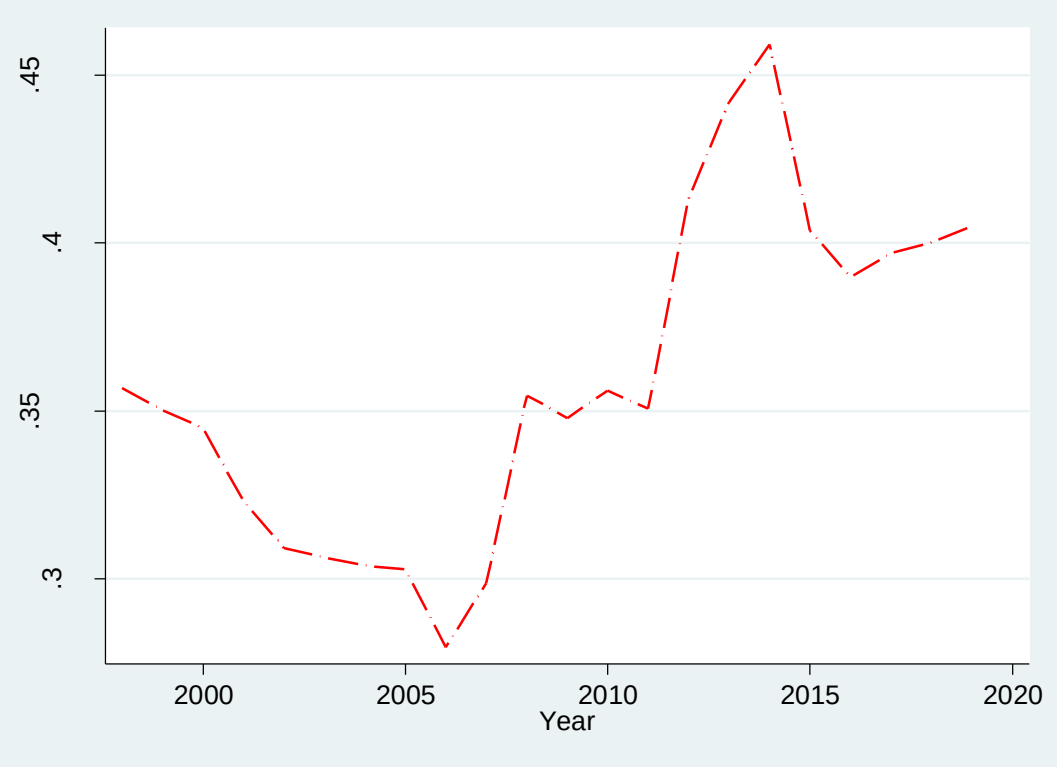

Figure 4.3 Exchange rate trend for years 1998 - 2019

Source: *Research findings, 2020*

4.3.4 ADF unit root test for Inflation and trend for Inflation

(a) ADF unit root test for Inflation

Table 4.4 ADF unit root test for Inflation

```
. dfuller cpi, lags(0)

Dickey-Fuller test for unit root                   Number of obs   =        21

                                 ———— Interpolated Dickey-Fuller ————
                 Test         1% Critical       5% Critical      10% Critical
                 Statistic       Value             Value            Value
——————————————————————————————————————————————————————————————————————————
 Z(t)            -2.644          -3.750            -3.000           -2.630
——————————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.0843
```

Source: *Research findings, 2020*

Results: from table 4.4 show Inflation is stationary at the level that has no constant term lag (0) since our test statistic computed Z(t) exceeds the D.F. Z(t) at in absolute terms at the critical value of 10%. |-2.644|>|-2.630| hence we reject the null hypothesis and accept the alternative theory that our inflation variable is stationary therefore we can use for other estimations.

(b) Trend for Inflation

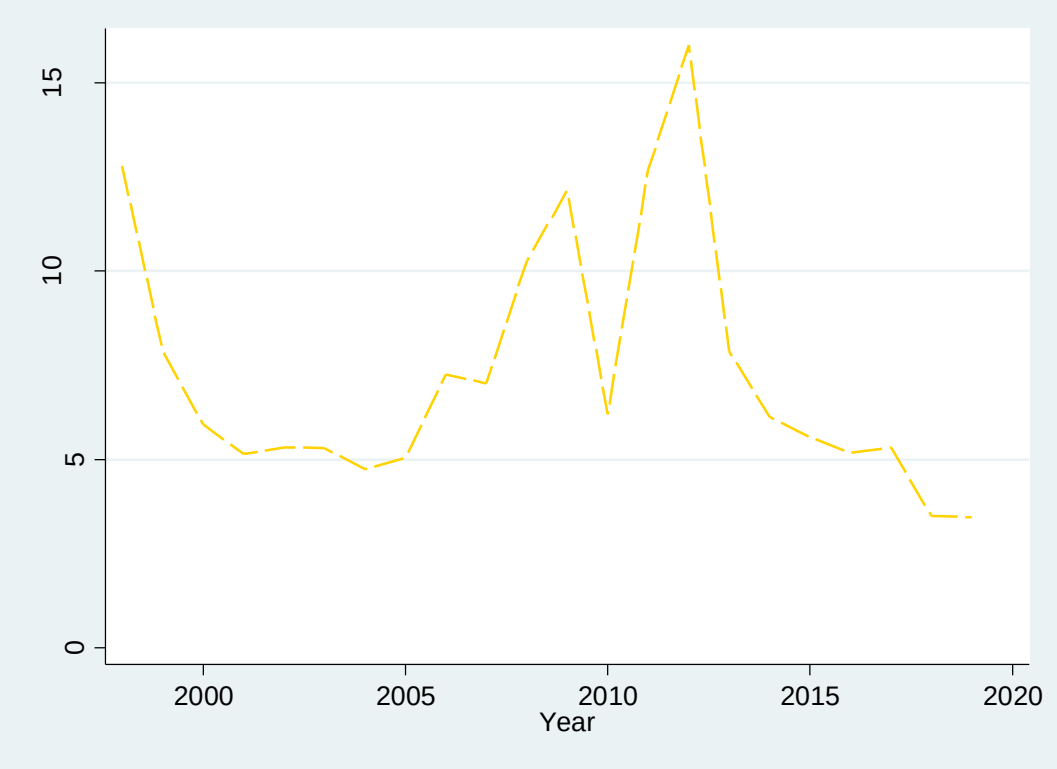

Figure 4.4 Inflation trend for years 1998 – 2019

Source: *Research findings, 2020*

Results: Inflation trends in Tanzania have been fluctuating, and double-digit inflation rates have been trending. Seasonal food crops contribute to the fluctuating inflation rate in Tanzania, where the inflation rate for food and non-alcoholic drinks is higher than for other products. Inflation has been steady and declining from the early 2000s to 2015; this may have been the result of a combination of strict monetary policy enforcement and a fall in food and energy prices.

From 1998 to 2019, Tanzania's inflation rate averaged 6.76 per cent, hitting an all-time high of 19.80 per cent in December 2011 and a record low of 3 per cent in November 2018.

4.3.5 ADF unit root test for population and trend for population

(a) **ADF unit root test for population**

Table 4.4 ADF unit root test for population

```
. dfuller labour, lags(0)

Dickey-Fuller test for unit root                    Number of obs   =        21

                                 ------------ Interpolated Dickey-Fuller ------------
                    Test         1% Critical       5% Critical      10% Critical
                 Statistic           Value             Value            Value
------------------------------------------------------------------------------
 Z(t)              -4.824            -3.750            -3.000           -2.630
------------------------------------------------------------------------------
MacKinnon approximate p-value for Z(t) = 0.0000
```

Source: *Research findings, 2020*

Results: from table 4.5 show population is stationary at the level that has no constant term lag (0) since our test statistic computed Z(t) exceeds the D.F. Z(t) at in absolute terms at the critical value of 10%. |-4.824|>|-3.000| hence we reject the null hypothesis and accept the alternative theory that our population variable is stationary therefore we can use for other estimations.

(b) Trend for Population

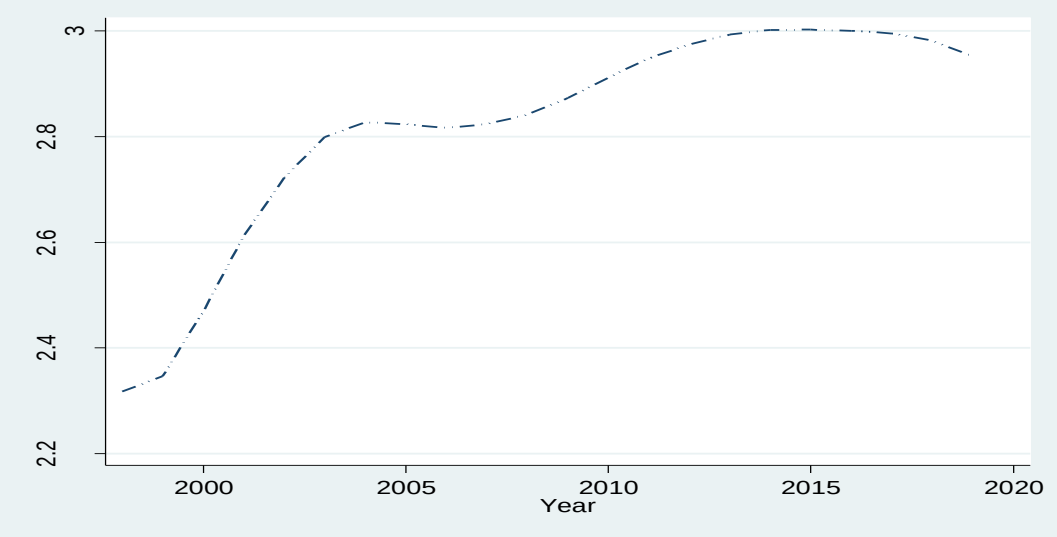

Figure 4.5 Population trend for years 1998 – 2019

Source: *Research findings, 2020*

Results: Tanzania was growing at a high-speed rate in the mid-1999 to 2004 and being stable at the mid-2015 to 2010. At the end of 2019, the country's population was 58 million, Tanzania's population is currently growing at a rate of 2.98%

4.3.6 ADF unit root test for real interest rate and trend for real interest rate

(a) ADF unit root test for real interest rate

Table 4.5 ADF unit test root for real interest rate

```
. dfuller rir, lags(0)

Dickey-Fuller test for unit root                   Number of obs   =        21

                                 ———— Interpolated Dickey-Fuller ————
                 Test         1% Critical       5% Critical      10% Critical
               Statistic           Value             Value            Value
——————————————————————————————————————————————————————————————————————————
 Z(t)            -8.807           -3.750            -3.000           -2.630
——————————————————————————————————————————————————————————————————————————

MacKinnon approximate p-value for Z(t) = 0.0000
```

Source: *Research findings, 2020*

Results: from table 4.5 show real interest rate is stationary at the level that has no constant term lag (0) since our test statistic computed Z(t) exceeds the D.F. Z(t) at in absolute terms at the critical value of 10%. |-8.807|>|-3.000| hence we reject the null hypothesis and accept the alternative theory that our population variable is stationary therefore we can use for other estimations.

(b) Trend for real interest rate

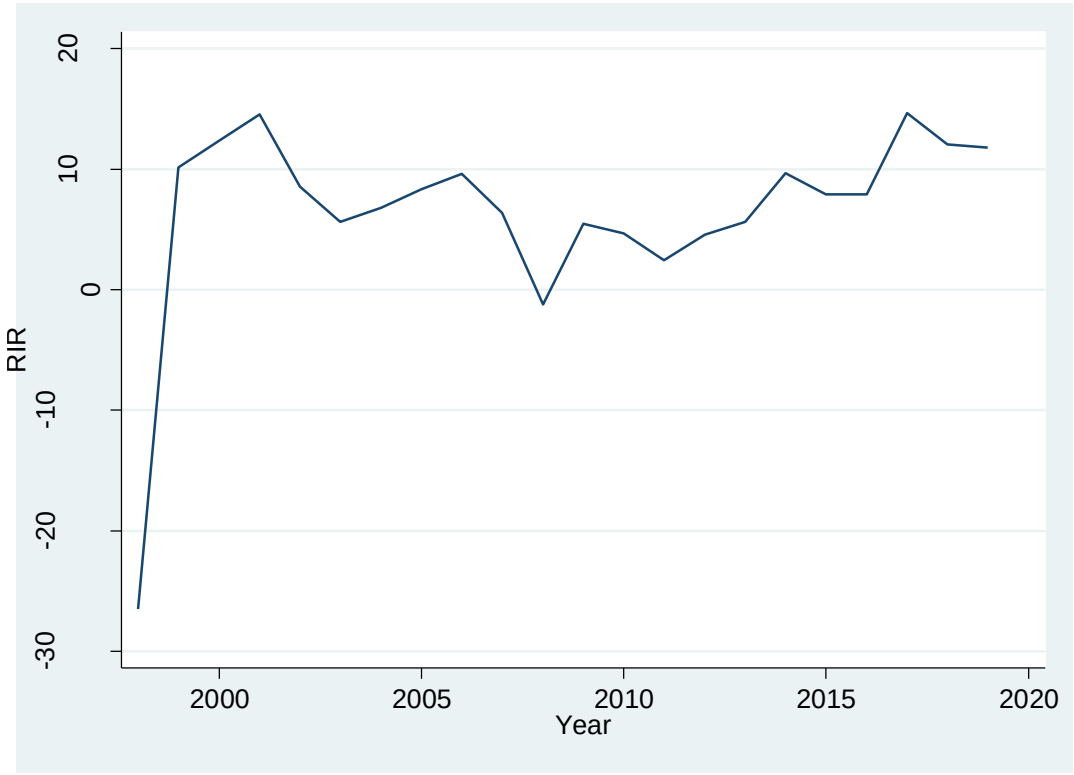

Figure 4.6 Real interest rate for years 1998 – 2019

Source: *Research findings, 2020*

Results: The real interest rate in Tanzania between 1998 - 2019, an average value was 6.74 per cent, with a minimum of -26.5 per cent in 1998 and a maximum value of 14.67 per cent in 2017. As of 2019, the latest rating is 11.84%.

4.4 Cumulative Sums Test of the model

Cumulative sums test used to assess the stability of coefficients/ parameters in multiple linear models in the form of $y = \alpha 0 + \alpha 1x + ... + \mu$. The implication based on the sequence of sums of standardised forecast errors. Under the null hypothesis of constancy value of the series outside the expected range.

H_0: There is no structural break

H_1: There is a structural break

Decision rule:

The decision rule on the above hypothesis is that we fail to reject the null hypothesis when a cumulative sums test using a 5% level of significance. The plot test and critical region bands; this indicates "no model intercept."

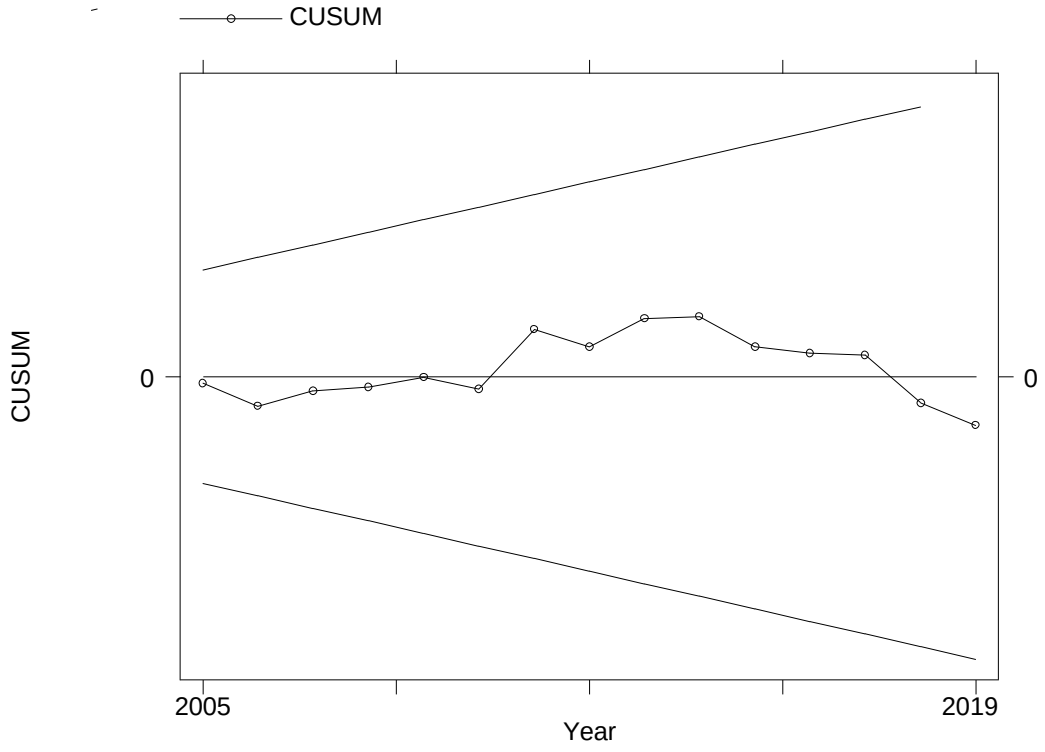

Figure 4.7 Stability test: CUSUM

Source: *Research findings, 2020*

4.5 Test for Linearity

Linearity implies that the relationship is linear between dependent and independent variables, or that if the connections are linear, they work better. The statistics that assume it is linear would underestimate the strength of the relationship if a relationship is nonlinear, or fail to detect the presence of a relationship. Linearity implies that for the variables, the quantity of change or rate of difference between two variables is constant for the whole range.

There should be a correlation between Independent Variables and Dependent Variables. The linear relationship between GDP and each independent variable was analysed to demonstrate the relationship between variables by using the scatter plot as below

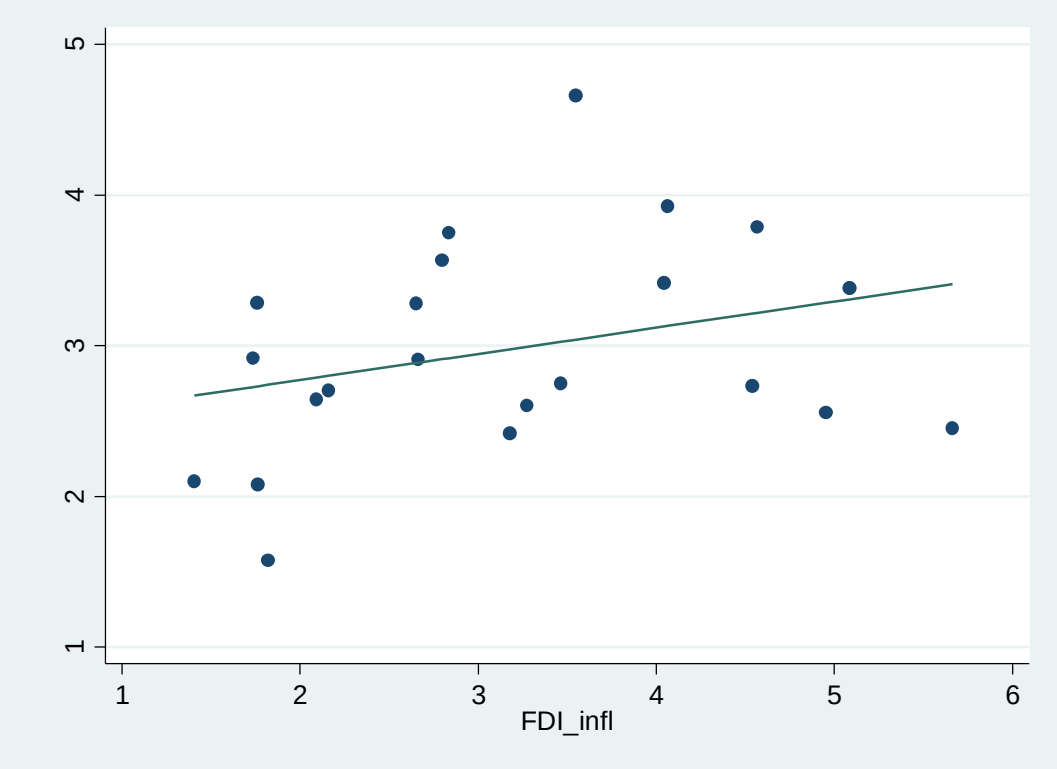

Figure 4.8 Augmented component-plus-residual plot for GDP and FDI

Source: *Research findings, 2020*

From figure 4.8, We see that there is a positive linear relationship between GDP and FDI, which does not violate the linearity assumption.

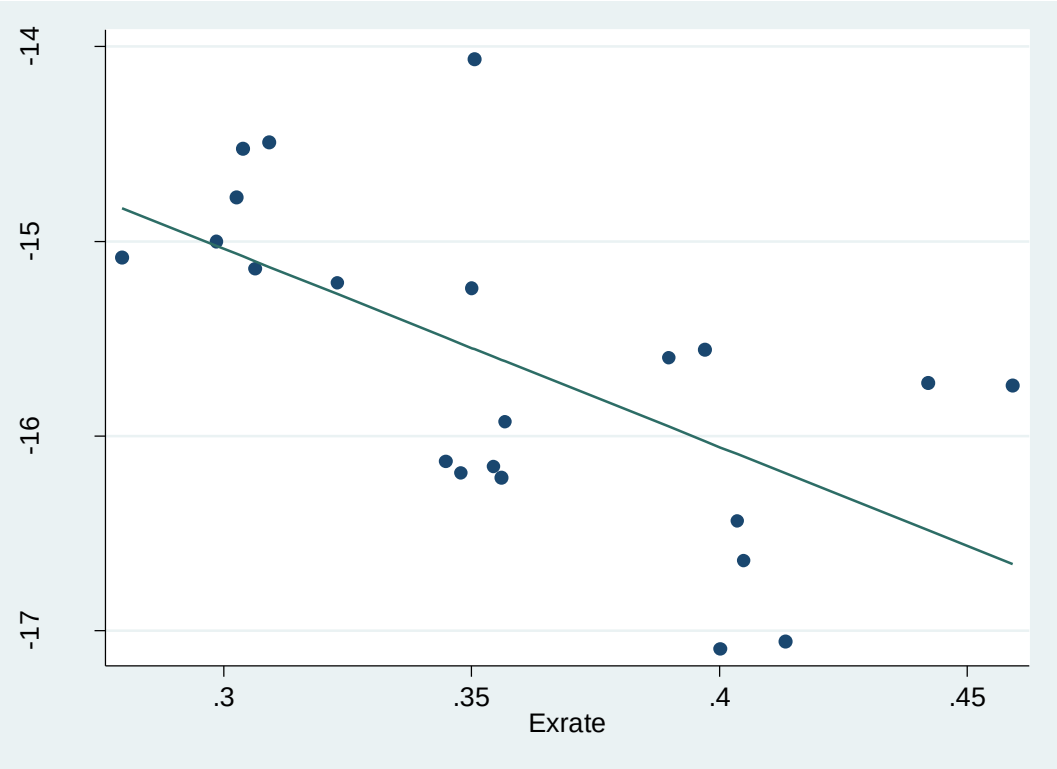

Figure 4.9 Augmented component-plus-residual plot for GDP and exchange rate

Source: *Research findings, 2020*

From figure 4.9, we can see that the nonlinear relationship between GDP and the exchange rate is negative; this violates the linearity assumption. Thus, against GDP, the exchange rate does not do better.

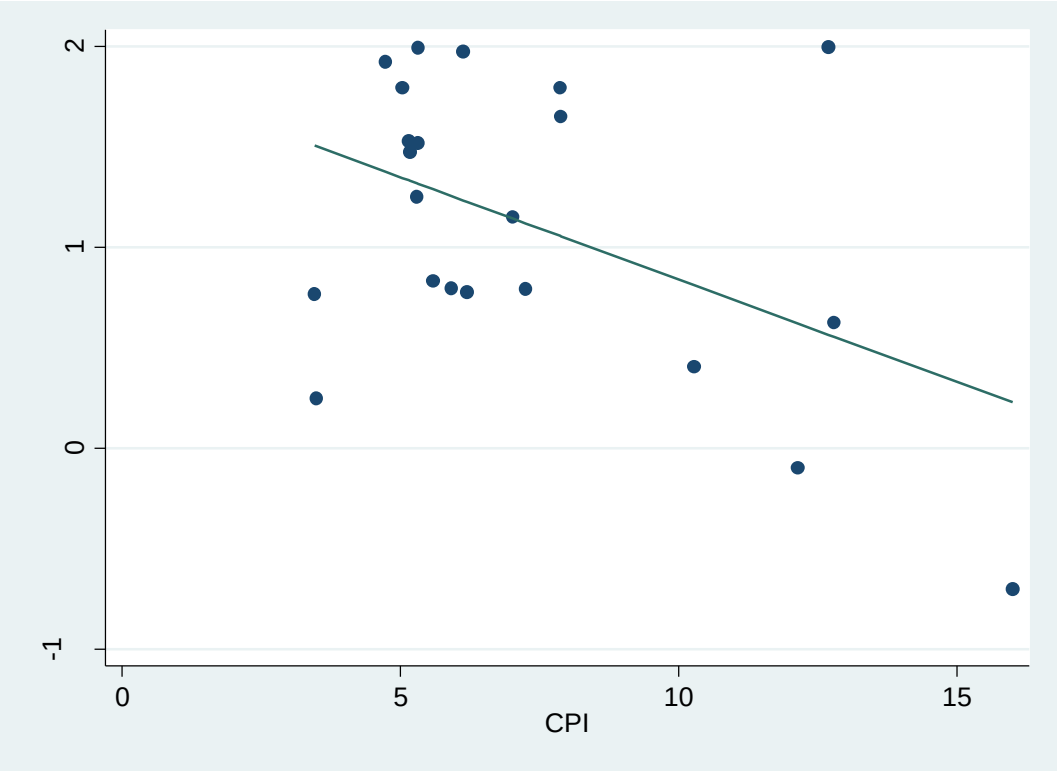

Figure 4.10 Augmented component-plus-residual plot for GDP and Inflation

Source: *Research findings, 2020*

From figure 4.10, we can see that the nonlinear relationship between GDP and Inflation; this violates the linearity assumption. Thus, against GDP, the exchange rate does not do better.

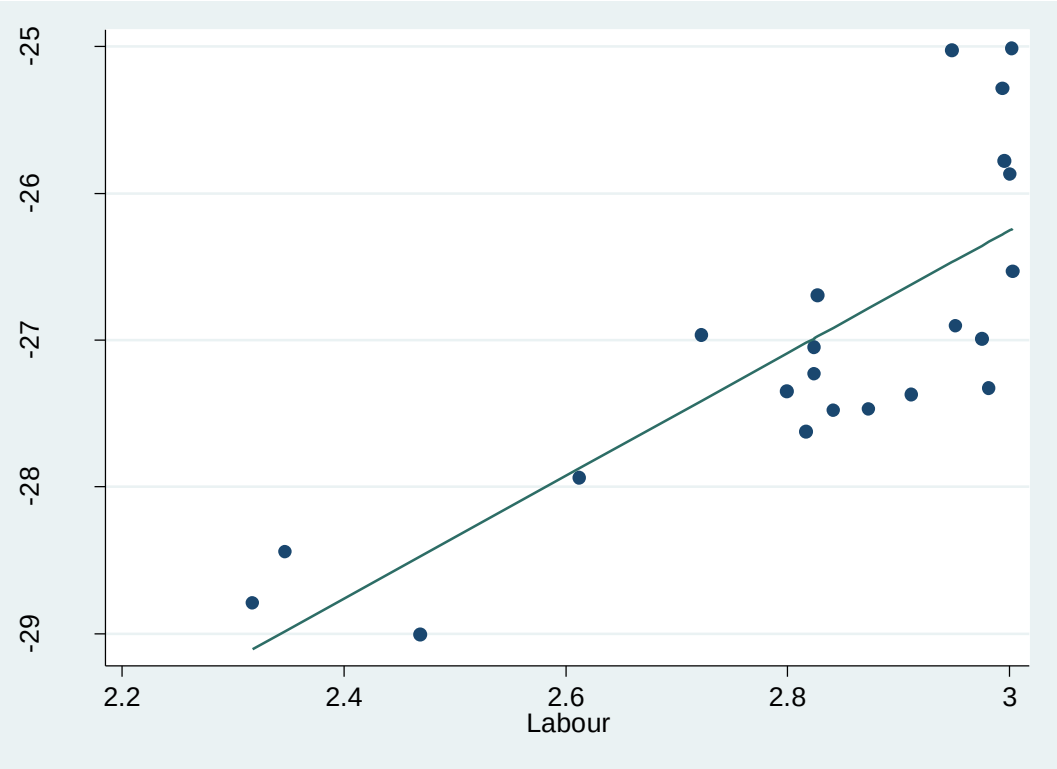

Figure 4.11 Augmented component-plus-residual plot for GDP and Population

Source: *Research findings, 2020*

From figure 4.11, we see that there is a positive linear relationship between GDP and Population, which does not violate the linearity assumption.

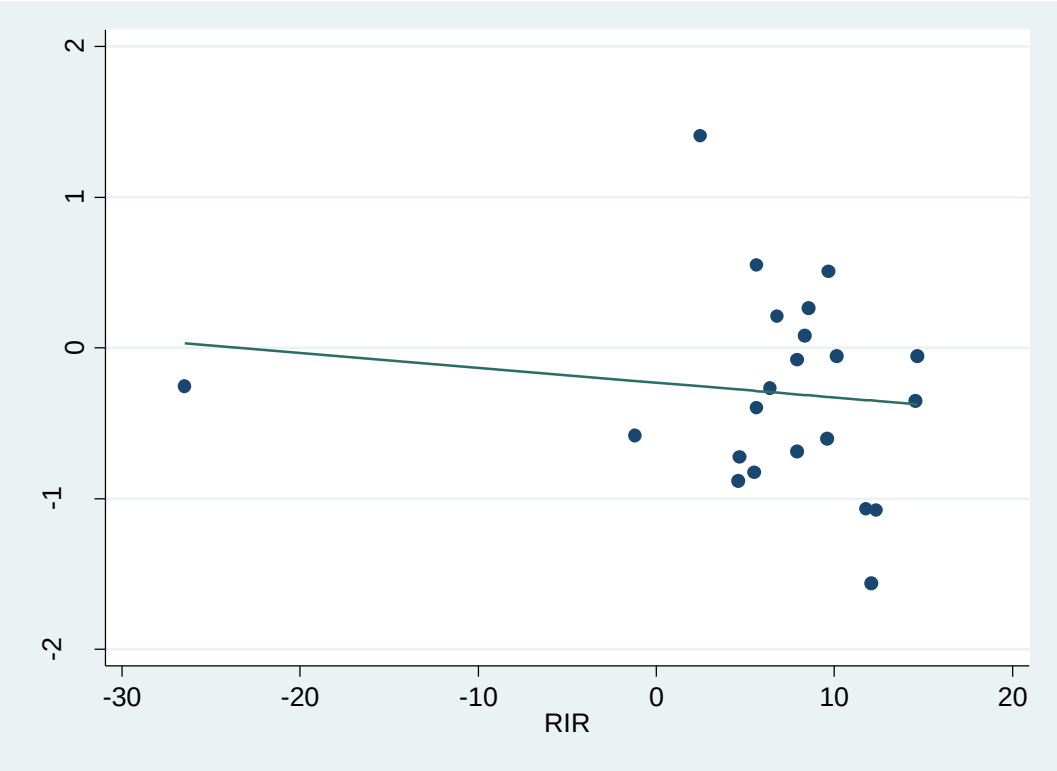

Figure 4.12 Augmented component-plus-residual plot for GDP and real exchange rate

Source: *Research findings, 2020*

From figure 4.12, we can see that the nonlinear relationship between GDP and real interest rate; this violates the linearity assumption. Thus, against GDP, the real interest rate does not perform better.

4.6 Test for Heteroscedasticity

Heteroscedasticity test performed to decide if, in regression analysis, the problem occurred. Heteroscedasticity implies a situation in which the variance of the dependent variable GDP differs through the results. Heteroscedasticity complicates research since specific approaches based on an assumption of equal variance in regression analysis. The hypothesis for Hetoroscedasticity is as follows:

H0: there is no constant variance of residuals (heteroscedasticity)

H1: variance of residuals is consistent (no heteroscedasticity)

Table 4.6 Test for Heteroscedasticity

```
. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
         Ho: Constant variance
         Variables: fitted values of rgdp

         chi2(1)      =     0.00
         Prob > chi2  =   0.9771
```

Source: *Research findings, 2020*

The results indicate that there is no heteroscedasticity because Prob>chi2 is 0.9771, which is greater than the 10% level of significance. Therefore we reject the null hypothesis, and we accept the alternative hypothesis; consequently, the variance of our residuals is constant; thus, our assumption has been satisfied.

4.7 Test for Multicollinearity

Multicollinearity occurs when there is a linear relationship between one or more independent variables. In this case, we have five independent variables (FDI, exchange rate, Inflation, Population and real interest rate). When we have a multicollinearity problem, the presence of the two independent variables in our model becomes a problem for estimation. Intuitively, a question arises since the inclusion of both would not bring more details to the model than the inclusion of only one of them. It is an undesirable condition where there are clear correlations between the independent variables.

The Variance Inflation Factor (VIF) statistical test used to test whether there was a multicollinearity problem. VIF tests how much multicollinearity problems skew the regression coefficient variance. If the VIF is equal to 0, there is no association between the independent tests. VIF measure 1 is an indicator of some interaction between predictor variables, but usually

not enough to trigger problems. The maximum appropriate VIF value would be 5.0; anything higher would imply a multicollinearity problem.

Table 4.7 Test for Multicollinearity

```
. vif

    Variable |       VIF       1/VIF
-------------+----------------------
         rir |      1.97    0.508732
         cpi |      1.85    0.540856
      labour |      1.49    0.671050
      exrate |      1.29    0.777832
    fdi_infl |      1.19    0.839589
-------------+----------------------
    Mean VIF |      1.56
```

Source: *Research findings, 2020*

From the results of the VIF is 1.56, this means that there is some relationship between our two independent variables, but not enough to trigger the issue of multicollinearity since our VIF does not exceed 5.0. The results demonstrate, therefore, that there is no problem with multicollinearity.

4.8 Interpretation of the time series regression results

A multiple linear regression model was used to determine the impact of FDI, exchange rate, Inflation, Population and real interest rates on Tanzania's economic development. Various authorities have reported time-series data for 22 years of FDI, exchange rate, Inflation, Population and real interest rate and GDP. Estimated results after transformation of variables and stationary testing in table 4.8

Table 4.8 Regression table

```
. reg rgdp fdi_infl exrate cpi labour rir
```

Source	SS	df	MS		
Model	15.2405563	5	3.04811125	Number of obs	22
Residual	8.66537299	16	.541585812	F(5, 16)	5.63
				Prob > F	0.0035
Total	23.9059293	21	1.13837758	R-squared	0.6375
				Adj R-squared	0.5242
				Root MSE	.73593

rgdp	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
fdi_infl	.1095951	.1406284	0.78	0.447	-.1885237	.407714
exrate	-10.71791	3.683762	-2.91	0.010	-18.52714	-2.908687
cpi	-.1196721	.064949	-1.84	0.084	-.2573577	.0180136
labour	3.840288	.9425956	4.07	0.001	1.842074	5.838501
rir	-.0123628	.027161	-0.46	0.655	-.0699416	.0452159
_cons	-.2302282	2.358666	-0.10	0.923	-5.230377	4.76992

Source: *Research findings, 2020*

The necessary interpretation of the results

The estimated model based on the regression results

$$RGDP = -0.23 + 0.109FDI\_INFL - 10.718EXRATE - 0.119CPI + 3.84LABOUR - 0.124RIR$$

Model evaluation

The level of significance is 0.05, and from our regression results, Prob>F = 0.0035, which is less than 0.05. There is the control of the independent variables FDI, exchange rate, Inflation, Population and real interest rates to explain the dependent variable RGDP; This implies that the Prob>F value then the overall model is statistically significant.

Coefficient of determination

The R square measure used to assess the fitness of the model, showing the amount of difference in the dependent variable explained by the model. The model is well adapted to describe the variance of the dependent variable (RGDP) by independent variables FDI, exchange rate, Inflation, population and real interest rates.

63.75% of the variation of the RGDP explained by FDI, exchange rate, Inflation, population and real interest rates while the remaining 36.25% is unexplained in the model.

4.9 Hypothesis Testing

Hypothesis tests, significance tests, and confidence intervals, which show whether or not there is a relationship between the two variables, test the null hypothesis and the alternative hypothesis.

Hypothesis 1

H_0: Foreign Direct Investment (FDI) has a relationship with the Gross Domestic Product (GDP)

H_1: Foreign Direct Investment (FDI) has no relationship with the Gross Domestic Product (GDP)

From table 4.8, t calculated that describes the relationship between FDI and GDP is 0.78 and t-tabulated from the distribution table are 2.080 at a level of significance of 0.05

t-calculated < t-tabulated : 0.78 < 2.080

Therefore we reject the null hypothesis, FDI has a relationship with GDP

Hypothesis 2

H_0: The exchange rate has a relationship with the Gross Domestic Product (GDP)

H_1: The exchange rate has no relationship with the Gross Domestic Product (GDP)

From table 4.8, t calculated that describes the relationship between exrate and GDP is 0.01 and t-tabulated from the distribution table are 2.080 at a level of significance of 0.05

t-calculated > t-tabulated : 2.91> 2.080

Therefore we accept the alternative hypothesis, exrate has no relationship with GDP

Hypothesis 3

H_0: The inflation rate affects the Gross Domestic Product (GDP)

H_1: The inflation rate does not affect the Gross Domestic Product (GDP)

From table 4.8, t calculated that describes the relationship between Inflation and GDP is 1.84 and t-tabulated from the distribution table are 2.080 at a level of significance of 0.05

t-calculated < t-tabulated : 1.84 < 2.080
Therefore we reject the null hypothesis; Inflation affects the GDP.

Hypothesis 4

H_0: The population growth rate affects the Gross Domestic Product (GDP)

H_1: The population growth rate does not affect the Gross Domestic Product (GDP)

From table 4.8, t calculated that describes the relationship between population growth and GDP is 4.07 and t-tabulated from the distribution table are 2.080 at a level of significance of 0.05

t-calculated > t-tabulated : 4.07 > 2.080
Therefore we accept the alternative hypothesis; population growth rate affects the GDP.

Hypothesis 5

H_0: The real interest rate affects the Gross Domestic Product (GDP)

H_1: The real interest rate does not affect the Gross Domestic Product (GDP)

From table 4.8, t calculated that describes the relationship between the real interest rate and GDP is 0.46 and t-tabulated from the distribution table are 2.080 at a level of significance of 0.05

t-calculated < t-tabulated : 0.46 < 2.080
Therefore we reject the null hypothesis; real interest affects the GDP.

4.10 Discussion

Table 4.8 of our regression model, there is a quick adjustment in the real economic growth (RGDP) when the independent variable changes.

The coefficients indicate that there is a positive relationship between FDI and economic growth in such a way that a 1 unit increase in FDI results to the rise by 0.109 of economic growth but statistically insignificant at 44.7% P-value, which is greater than 5% significant level, holding other factors constant.

There is a negative and statistically significant relationship between economic growth and exchange rate in such a way that 1 unit increase in exchange rate results in a decrease of 10.718 of economic growth, holding other factors constant. The P-value of exchange rate coefficient is 1%, which is less than 5% significant level hence validate the significance of the parameter.

There is a negative relationship between economic growth and inflation rate in such a way that 1 unit increase in inflation rate results in a decrease of 0.119 of economic growth, holding other factors constant. The P-value of exchange rate coefficient is 8.4%, which is greater than 5% significant level hence does not validate the significance of the parameter.

There is a positive relationship between economic growth and population growth in such a way that 1 unit increase in population growth results in a rise of 3.84 of economic growth, holding other factors constant. The P-value of exchange rate coefficient is 0.1%, which is less than 5% significant level hence validate the significance of the parameter.

There is a negative relationship between economic growth and real interest rate in such a way that 1 unit increase in real interest rate results in a decrease of 0.012 of economic growth, holding other factors constant. The P-value of exchange rate coefficient is 6.55%, which is greater than 5% significant level hence does not validate the significance of the parameter.

From the calculated results, all variables were satisfied. All variables are stationary, multicollinearity and heteroskedasticity were not found indicating that the estimates are accurate and can therefore be relevant. The results of the regression analysis showed that foreign direct investment and population have a positive effect on economic growth (GDP) which means that FDI contributes positively to the economy of Tanzania.

Results have shown that exchange rate, Inflation and real interest rates have a negative impact on Tanzania's economic growth; This suggested that they are harmful to Tanzania's economic development, so shall be regulated, and Tanzania should strive to maintain a single-digit inflation rate because rising Inflation is detrimental to the economy. The predicted model was accurate from our findings.

CHAPTER FIVE

RECOMMENDATIONS AND CONCLUSION

5.0 Introduction

The focus of this research was to assess the effect of foreign direct investment, exchange rate, Inflation, population and the real interest rate on Tanzania's economic development. From this analysis, we observed that FDI and population had made a significant contribution to economic growth in Tanzania, and the results indicate that the more FDI, the more economic growth. It is, therefore, necessary for the Government of Tanzania to review investment policies that enables FDI inflows to continue to have a positive impact on the local economy in Tanzania. FDI is a significant predictor of globalisation in Tanzania. Foreign businesses also have advanced environmental technology and can use them in all the countries in which they work. International firms may be able to increase competition. This would improve the well-being of customers by improving product quality, making more goods available on the market, widening the product market and lowering product prices. However, small producers in the host countries can suffer if they are unable to cope with competitive prices. In this situation, local investors squeezed out by international firms. Foreign companies may become important employers by creating new jobs in their new ventures. Multinational corporations can also contribute to tax revenue through their activity. It is, therefore, necessary for the Government of Tanzania to establish policies that enhances the positive impact of FDI on the local economy.

The study also found that the rise in the general price level, the exchange rate and the real interest rate were not a positive factor for sustainable economic growth in Tanzania. These findings have significant policy consequences for both domestic policymakers and development partners, suggesting that managing Inflation, exchange rate and interest rate is a critical condition for fostering economic growth. Thus, policymakers should concentrate on keeping Inflation, exchange rate and the interest rate at a low pace, introduce steps to increase the purchasing power of the home currency and lower the borrowing rate as possible. Inflation stability is an essential factor in the results we can see that Tanzania's inflation rate negatively linked to Tanzania's economic development.

5.1 Recommendations

Relevant, long-term, sustainable economic policies to boost FDI in Tanzania must take into account the following challenges: weak currency, stable, inadequate technology, poor infrastructure, unskilled labour, poor investment conditions, poor governance, insufficient regulatory environment, financial capital and unfavourable tax systems and corruption. All of these challenges, if not addressed, can lead to adverse FDI outcomes in Tanzania. Thus appropriate policies need to be addressed to allow Tanzania to benefit from FDI.

Tanzania has done a fantastic job of encouraging and enhancing investment climate. However, there are always obstacles. The Government shall take steps and reduce these challenges. Recognising a problem is the first step in overcoming it.

The Government advised taking effective action to correct these deficiencies and to attract the FDI needed for economic growth. Some of the suggestions made by the researcher include;

- It is establishing more robust governance, administrative, legal, regulatory and judicial system. This includes enhancing the accessibility of the formal and informal court system and speeding up the standard of service rendered by the commercial court system, improving customer service for services provided by the public and judicial services to the private sector. One of the keys to attracting investment is the restructuring of the public administration and the analysis of various needless regulations and malpractices, which are also a prerequisite for corruption schemes. The Government of Tanzania must provide a transparent and effective incentive and regulatory system to attract investors and support the country.

- They are strengthening leadership and security capability. Stability of the economic climate, barriers to entry and exit, transaction costs, property rights, contractual obligations, investment structure and good governance, are essential for the convergence of the growth momentum of private capital flows.

- Following a sharp increase in FDI inflows to electricity and gas, on-going initiatives to enforce the policy and regulatory system for the Management of electricity and gas activities need to speed up to provide guidance and ensure adequate benefits for the

region. If well handled, these gas reserves can change Tanzania's economic future. Although the most critical impacts of this discovery on the local economy not be felt for at least seven to ten years, until exploitation starts on a full scale, the discovery also results in increased economic activity during the construction process. In the long term, the magnitude and timing of the discovery effect remain unknown. Careful Management of revenues generated from newly discovered natural resources would be needed to ensure the effective utilisation of these revenues and to achieve inclusiveness.

- It is combating the practices of corruption and bribery. For a company, paying bribes is like paying a fee, but then the firm faces more confusion. Generally speaking. In future operations, however, certainty is needed for FDI in activities such as manufacturing. Corruption and conflict are essential components of the political risk assessment, which, in turn, determine investor perceptions of the business environment in a country. It is, therefore, necessary for Tanzania to make efforts to promote good governance and combat corruption.

- Implementation of land law reforms and modification of the clause and transfer of property rights

- Improving investment in essential technology, infrastructure, and expertise are the main determinants of FDI. Surveys show that a low level of required skills is one of the key obstacles to investment in Africa. Besides, if there is no proper infrastructure, investors must develop their own to manufacture, transport, sell or export their goods. At the same time, infrastructure and expertise help to absorb the beneficial results of FDI.

- Tanzania must strive for and try to provide a skilled workforce with sufficient infrastructure (ports, water pipelines, electricity and telecommunications). With successful infrastructure investment improved, local companies can more easily catch information spill overs, for example, by being local suppliers; this is also important to allow investors to produce higher returns and to promote reinvestment.

- Encourage investment in the agricultural sector, which is the most critical sector for economic growth in Tanzania. Efforts to make agriculture more appealing to investors to be stepped up to raise agricultural inflows, which have so far remained poor relative to

conventional recipients. Such initiatives include investment in rural infrastructure, irrigation schemes, rural electrification to promote agro-processing and land mapping and categorisation across the country.

- The implementation of skills localisation policy needs to be improved, for example, through the development of skills programs that are compatible with the skills required by investors to speed up the transition of skills to locals.

- Determine if and how FDI is consistent with growth goals. FDI is not a solution to all economic difficulties. However, to find answers to financial problems, it is necessary to understand that FDI varies from local investment, foreign aid flows or portfolio inflows. The presence of such disparities allows a nation to analyse how FDI achieves its economic objectives. For example, Tanzania has classified various investment promotion sectors as a priority and lead sectors. It is also essential to know if there are no political disputes.

The Government needs to continue to combat corruption and to improve transparency and accountability across industries and at all levels. The Government has made substantial progress in implementing the Transparency Initiative for Extractive Industries, which increasingly relevant in the production of natural gas. Strengthening public financial management in the country, both at the central and local levels of Government, is essential for high-quality infrastructure investment, for more efficient service delivery and for attracting private investment. Policies to help monitor trends in Inflation, exchange rate and interest rate in Tanzania.

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Appendices

Table 9: Secondary research data collected from various sources

Year	GDP (in million)	FDI Inflows (in percentage)	Population Growth Rate (In million)	Inflation Rate	Real Interest Rate	Real Exchange Rate
1998	12,270,448,700	1.40	31,924,196	12.80	-26.50	80.61
1999	12,711,213,451	4.06	32,682,239	7.89	10.12	206.52
2000	13,375,976,354	3.46	33,499,180	5.92	12.36	456.26
2001	13,581,644,246	4.04	34,385,856	5.15	14.54	481.19
2002	14,142,035,080	2.80	35,334,788	5.32	8.55	288.28
2003	15,224,257,698	2.09	36,337,782	5.30	5.62	444.48
2004	16,675,948,415	2.65	37,379,767	4.74	6.79	615.82
2005	18,399,046,025	5.08	38,450,320	5.03	8.33	760.78
2006	18,649,590,248	2.16	39,548,663	7.25	9.61	556.97
2007	21,843,529,025	2.66	40,681,414	7.03	6.39	505.54
2008	27,941,177,435	4.95	41,853,944	10.28	-1.20	446.84
2009	29,081,425,282	3.28	43,073,834	12.14	5.49	-38.66
2010	32,014,249,841	5.66	44,346,525	6.20	4.67	369.17
2011	34,657,139,495	3.55	45,673,338	12.69	2.46	387.41
2012	39,650,530,214	4.54	47,052,481	16.00	4.59	203.26
2013	45,680,532,614	4.57	48,482,266	7.87	5.65	297.32
2014	49,964,788,814	2.83	49,959,822	6.13	9.66	437.39
2015	47,378,599,025	3.18	51,482,633	5.59	7.91	42.27
2016	49,774,021,003	1.74	53,050,790	5.17	7.90	530.76
2017	53,320,625,959	1.76	54,663,906	5.32	14.67	892.64
2018	58,001,200,572	1.82	56,318,348	3.49	12.06	1582.36
2019	63,177,068,175	1.76	58,005,463	3.46	11.79	1196.99

Source: World Bank Data, Bank of Tanzania, OECD, 2020