The Impact of Foreign Direct Investment on Economic Growth in Zambia

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ABSTRACT

Background: This article adds to scarce literature on the nexus between Foreign Direct Investment (FDI) and economic growth in Zambia.The study looked at overview of FDI in Zambia, literature of FDI- economic growth nexus, using Ordinary Least Square (OLS) Multiple Regression statistical technique and policy implications from findings.

Aim: The aim is to see how FDI has worked in Zambia in terms ofhuman capital accumulation, infrastructural development, trade liberalisation and macroeconomic stability.

Settings: We focus on the period between 2014 and 2021.

Methods: Data was collected from government departments, journals andon internet. Questionnaires were also used to collect primary data which was analysed using the OLS multiple regression.

Results: Results revealed that overall effects of FDI are positively associated with growth. It also showed a positive relationship between FDI and human capital accumulation, trade liberalisation and macroeconomic stability. Infrastructural development had a transposed effect on FDI.

Conclusion: The results suggest that FDI is an efficient tool in economic growth. At this, the paper recommends amongst others that government should put mechanism to attract capital flows. This can be in terms of policies relating to increase trade, and government should ensure that the needed infrastructural facilitiesare provided to attract more investors.

Contributions:This article also contributed existing literature.It contributed to the current understanding of the FDI-EG nexus. The holistic analysis of this study added to existing research by identifying the variables that influence both FDI and economic growth in Zambia which has not been done before.

Keywords: Foreign Direct Investment, Determinants of FDI, Economic Growth, Gross Domestic Product, Zambia.

INTRODUCTION

Foreign Direct Investment (FDI) is the net inflow of investment to acquiring long lasting management interest in companies being managed in an economy other than that of investors (World Bank, 2014). FDI inflow is important in many ways such as the creation of employment, enhancement of competition, transfer of skills through training and growth of Gross Domestic Product (GDP). FDI also offer Less Developed Countries (LDCs) the chance to reduce dependence on foreign aid, thereby increasing the state's independence from donor policies. These are some of the reasons why LDCs have been strongly attracted to FDI as a source of external finance. Accordingly, many governments have created policies aimed at encouraging inward FDI flows. Zambia is among the LDCs that has received significant amounts of FDI inflows in different sectors. Most of the FDI inflows in Zambia have been in the mining, construction, infrastructure, manufacturing, textiles, agriculture and tourism sectors. The government

introduced the Zambia Development Agency (ZDA) in 2007 through the ZDA Act No 6 of 2006 as the primary legislation for investment in Zambia and mandated to offer incentives such as waivers on customs duty on imported equipment, excise duty and value added tax, among other concessions to investors who are willing to invest not less than US$ 10 million in identified sectors or US$ 500,000 in Multi-Facility Economic Zones (MFEZ) it established. An investor, foreign or local, is free to identify and suggest any location in the country deemed economical for development of MFEZ, although government has prioritized designated areas in Lusaka, Ndola, Mpulungu, Chembe, Nakonde, Kasumbalesa and Mwinilunga. Three MFEZs have since been set up in Zambia through the support of the Chinese government to facilitate Chinese investments and exports which are Chambishi MFEZ on the Copperbelt, the Lusaka East MFEZ and the Lusaka South MFEZ. The MFEZs attracted a lot of FDI from China which increased exports and economic growth (Leslie, 2014). Despite the efforts to attract Foreign Companies by the government, Zambia still has low levels of Manufacturing Companies coming into the country.Following the above brief history of the economy of Zambia, this paper was seeking to examine the impact of foreign Direct Investment on Economic Growth in Zambia for the period 2011 to 2021.

Statement of the Problem

FDI has been playing significant roles in the development of many economies in the world. However, in Zambia FDI has not contributed much because of the combination of various factors which attract FDI. The determinants of FDI have become an important topic not only for the government and all stakeholders. Moreover, the importance of FDI to Zambia arises in view of little performance of preceding policies that concentrated more on the attraction of FDI. Notwithstanding the broad efforts done to attract FDI in Zambia, it seems very little attention has been paid to help to attract meaningful FDI in the country. Although ZDA targeted many developing countries, by extending its services, its coverage has remained minimal and much effort is needed to attract FDI which will contribute to sustainable development. One of the serious impediments is the limited capacity of ZDA to cover many countries which can come and invest in Zambia.

Research Objectives

The main research objective of the study was:
• To identify and gain comprehensive knowledge on the determinants of FDI in LDCs.

This objective is supported by specific objectives which are:
• To identify the determinants of FDI in Zambia

• To assessing impact of determinants of FDI in Zambia

• To determine the contribution of FDI in Zambia

Research Questions

In view of the different levels of FDI trends in Zambia, the following key question was to be answered:
• What are the determinants to attract the inflow of FDI in LDCs?
The main research question is supported by the following specific questions:

• What are the determinants in attracting FDI in Zambia?

• What is the impact of determinants of FDI to the economy of Zambia?

• What are the contributions of FDI in Economic Growth in Zambia?

Justification of the Study

Many writers are interested with the role of FDI on economic growth, not only in the developed countries, but also in the LDCs. Indeed, FDI became an important issue in LDCs as it is viewed as a way of developing their economies. The importance of FDI to the growth of the economy of Zambia and its contribution to poverty reduction underscores the need for complete analysis of the factors affecting it and required regulations and strategies to be put in order to improve FDI attraction. Previous studies on FDI have mainly concentrated on its potential benefits for LDCs in terms of job creation, technology transfers and economic growth (Quazi, 2007). This study was seeking to fill the gap in the literature by analysing FDI in Zambia with a broader view covering the benefits of the whole economy as compared to the narrow approach of FDI in Zambia.

Relevance of the study to Economics

The presence of FDI has become very important in providing the source of development in different countries. Studies on literature identified many ways in which FDI could benefit the countries receiving it. Empirical studies of FDI's presence in LDCs reveal results which are different. Previous studies focused on the link between FDI and GDP by undertaking comparative studies on several LDCs, while this research try to study on national perspective of FDI in Zambia. This shows that the research is relevant to development policy. Therefore, it was written to serve as requirement as partial fulfilment of Master of Arts in Economics.

Main FDI driving factors: Theoretical framework

There are many theories with different explanations on the determinants of FDI. These theories are important stages towards the creation of a coherent framework for the attraction of FDI. However, the capacity of each to serve as a self-contained general theory, to explain all types of FDI has been questioned in the works of different scholars.

The theoretical framework for FDI is mainly attributed to the eclectic paradigm by (Dunning, 2008). The eclectic theory is a combination of the traditional trade economics and Internalisation theory. The eclectic theory states that the interest of a firm investing abroad is based on three main factors: the extent to which a firm owns assets that other firms it is competing with do not have; whether the company can benefit from not selling or leasing these assets to other company; and the level of rents that can be earned by exploiting these assets (Le Hoang and Ba,2015). In all cases, the locational factors of the host country are important, where these include market size, skilled labour, labour costs, knowledge-related assets, availability or quality of infrastructure and natural resources (Nketiah-amoonsah and Sampong, 2019). It is the locational aspects of the eclectic theory that differentiates this theory of FDI from the earlier market structure approaches based on oligopoly and monopoly (Hagan and Amoah, 2019).

While the eclectic theory does explain the existence of FDI, its main problem is that it does not explain fully the recent trends in FDI such as the surge and concentration of FDI among similar countries.

Furthermore, no sound empirical models have been generated in order to compare real data with the theory (Nayak, 2021).

Hypothesis Development

Based on the theoretical framework above, hypotheses are formed in order to analyse their impact on inward FDI, or whether inward FDI has impact on economic growth in GDP sense.

Hypothesis One

H0. There is no statistically significant relationship between GDP and FDI inflows.
H1. There is a statistically significant relationship between GDP and FDI inflows.

Hypothesis Two

H0. There is no statistically significant relationship between human capital accumulation and FDI inflows.
H1. There is a statistically significant relationship between human capital accumulation and FDI inflows.

Hypothesis Three

H0. There is no statistically significant relationship between infrastructure development and FDI inflows.
H1. There is a statistically significant relationship between infrastructure development and FDI inflows.

Hypothesis Four

H0. There is no statistically significant relationship between trade liberalisation and FDI inflows.
H1. There is a statistically significant relationship between trade liberalisation and FDI inflows.

Hypothesis Five

H0. There is no statistically significant relationship between economic stability and FDI inflows.
H1. There is a statistically significant relationship between economic stability and FDI inflow.

LITERATURE REVIEW

Past researchers have studied impact of FDI on economic growth and they came up with varied results.There is a broad concession in the various literature regarding the multidimensional impact of FDI on the economy of the host-country, as they represent a well-organized way of increasing its export potential, of improving the growth of the economy and, finally, of improving welfare. GDP growth is a very important factor in attracting FDI into the country. Hagan and Amoah (2019) argued that the inflow of FDI help to stimulate the country's economic growth through technology transfer and spill-over effect on domestic firms. According to the study by (Turkovic, 2017) on the link between FDI and GDP in Iran using augmented dickey-fuller model and ARDL model, net FDI inflow significantly affect economic growth. Nketiah-amoonsah and Sarpong (2019) examined the impact of FDI on economic growth in Sub Saharan Africa. Their findings showed that FDI has a favourable effect on economic growth. Over a period 1981 to 2017, Mohd and Muse (2021) conducted a study in Ethiopia using the VAR model. According to their findings, FDI has a beneficial and considerable effect on economic growth both in

short and long term. A study by (Srinivasan, 2011) claimed that the rise in GDP and GDP per capita are significantly attracting market seeking FDI.

Meanwhile, (Sahraoui et al, 2015) found out that there is a uni-directional causality running from GDP to FDI inflow. Alfaro (2017) supported the FDI-Economic Growth positive nexus. However, (Nwankwo et al, 2013) find that employment, technology transfer, local firm growth is positively affected by FDI.

Despite the benefits of FDI on GDP, other scholars suggested that it can also lead to some weak relationship, null relationship or inverse effect. Zhu (2017) found that FDI does not have any significant effect on economic growth.

However, other studies found negative impact of FDI on economic growth. In the recent study, Khobai (2018) found that foreign investment had a negative effect on the economic performance of a country and domestic Investments benefited the economy more.Similarly, Dinh et al. (2019) conducted a study on developing countries from 2000 to 2014 by applying VECM and FMOLS. Their short-run result shows foreign direct investment hurts economic growth, but it has a positive effect in the long run.

LiteratureGap

The observed gap here is that only few researches have been done on the relationship between FDI and economic growth in Zambia hence having lack of data on the topic. Policy insight can be gained from the investigation as proposed in the study. This research is aimed at filling up the gap and add on literature by focusing on the study of the relationship between FDI and economic growth in Zambia with different variables, with the recent changes and adding of data in recent time.

RESEARCH METHODOLOGY

Description of the Study Area

The study was conducted in Lusaka district and it targeted foreign direct companies within the district. The study area of was chosen because most of the foreign direct companies in Zambia were domiciled in Lusaka and the district was also within proximity to the researcher.

Research Design

A research design is a set of guidelines and instructions to be followed in conducting the research (Creswell, 2018).A design is used to structure the research and to show how all major parts of the research project-the samples or groups, measures, treatment or programmes and so on Work together to try and address the central research questions. In other words, the research design is the overall plan for relating the conceptual research problem to relevant and traceable empirical research. In this research, the research design used was a convergent parallel mixed method design. The researcher collected qualitative and quantitative data concurrently and analysed the two data sets. The researcher mixed the two data sets by merging the results during interpretation.

Research Approach

The research used a case study approach. According to Davis and Craven (2016), Case studies are analyses of persons, events, decisions, periods, projects, policies, institutions, or any other systems that are studied holistically by one or more methods.

Sample Size

Determination The population of this study included 40 Business managers of foreign firms in Lusaka and Chambishi Multi-Facility Economic Zones (MFEZ).The study also included 20 officers from Zambia Development agency (ZDA) and Zambia International Trade and Investment Centre.

Sampling Methods

For the survey, the researcher used non-probabilistic sampling called purposive random sampling.

Sources of Data

The researcher used both secondary and primary data sources. Secondary data sources included literature and statistics from journals and books. Primary data sources include survey and interviews.

Instruments of Data Collection

The study utilised both primary and secondary data in order to document the relationship between foreign direct investment and economic growth. Primary data was collected by use of structured questionnaire which was personally administered to employees of selected foreign companies. Data was also collected through interviews by use of the interview guide, interviewing key people in the organisations as well as reviewing literature from selected government documents, reports, journals and published articles relevant to the study. The method used was from the method of triangulation which involved the use of several sources of information such as Document Review, Key Informant Interviews and Survey.

Method and Time of Data Collection

The secondary data was collected by reviewing documents and statistics obtained from journals and books through libraries, internet and public offices. The data reviewed was for period between 2014 and 2021.The primary data was collected through a survey done by the researcher during the month of August, 2022.

Data Analysis

Data from literature which involves statistics from journals and information from public offices was transcribed and the resulting statistics were compared in relation to the objectives of the Study. The resulting data from the survey came from the respondents and were benchmarked against the research questions to find out the views of respondents on the FDI and economic growth nexus. The resulting data from each of the categories were benchmarked against the study questions. The responses to the questions were analysed. Since part of the study is descriptive by nature the resulting data was processed using Microsoft Excel and then presented in terms of graphs and percentages. The quantitative data from the survey was analysed using Statistical Package of Social Sciences (SPSS).

Ethical Considerations

Great care was taken to protect the research respondents. First, the purpose of the research is to explain to the participants and they were given an option to choose whether they want to participate or not and that they can withdraw at any point. Participants were assured that no harm would come to them as a result of their participation as the information was to be kept confidential and used for the purpose of research. The questionnaire did not have any slot for name in order to assure anonymity of the respondents.

PRESENTATION OF FINDINGS

Introduction

This chapter presents the analysis of the findings study. The analysis in this chapter is based on the responses from research survey questions and the secondary data collected. The research was aimed at discovering the determinants of FDI in Zambia. The main areas of concern in the research are the identification of the determinants for attracting FDI in Zambia and gain complete knowledge on the determinants of FDI in LDCs and the contributions of FDI to the GDP of Zambia and this was according to the research objective.

Analysis of Secondary Data

This segment involves conducting exploratory data analysis on annual time series secondary data covering from 2014 to 2021.

Variable Description

The majority of variables in the modelling are considered on the basis of percentage of total population. Data on FDI inflows, students in technical education, and internet subscribers are expressed in per capita terms while the primary education enrolment rate and GDP are in percentage terms. Data definitions and sources are in Table 1.

Table 1: Variable Definitions

FDI inflows	FDI inflows by country (US$) (UNCTAD 2012)
% of Population in vocational or technical education	% of population enrolled in colleges across the country, proxy for Human Capital (World Bank Development Indicators, 2021)
Primary School Enrolment Rate	Rate of enrolment in primary education to proxy basic literacy, proxy for Human Capital Accumulation (WDI, 2021)
% Population of Internet Users	% population using internet users either on a post-paid or prepaid basis, proxy for infrastructure (WDI, 2021)
Merchandise Trade as % of GDP	Sum of imports plus exports as % of GDP, proxy the degree of liberalisation, as in (Nguyen, 2020).
Inflation	Annual % change in the cost of consumer goods and services, proxy for macroeconomic stability (UNCTAD, 2021).
Labour Force (% of Population 15+)	% of population 15 + who meet the ILO definition of economically active persons,proxy for Human Capital(WDI, 2021)
GDP per capita	GDP per capita, measured as the reciprocal of Yield on capital investment (WDI, 2021)

Analysis of the Panel Data Estimates
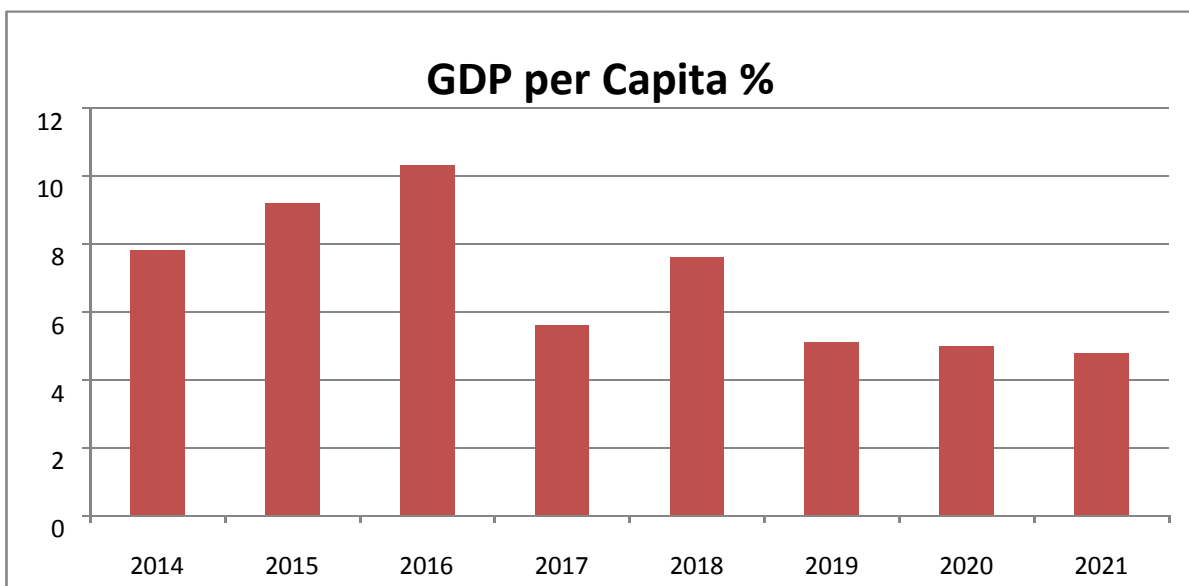
Gross Domestic Product (GDP) per Capita

The following are the statistics of GDP per capita:

Table 2:GDP per Capita in the period 2014-2021 (%)

YEAR	2014	2015	2016	2017	2018	2019	2020	2021
GDP per Capita	7.8	9.2	10.3	5.6	7.6	6.7	4.9	4.8

Source: Zambia Development Agency (2022).

Figure 2: GDP per Capita (%)

Source: Analysed data (2022).

The GDP per capita increased steadily from 7.8 % in 2014 to 10.3 % in 2016 and slumped to 5.6 % in 2017. In 2018, the GDP per capita increased to 7.6 % but declined steadily to 4.8 % in 2019. The data indicated that the economy grew by 4.9% in 2020 and 4.8% in 2021 as compared to 6.7 % in 2020. The decline was caused by reduction of investment in mining and the economy was driven by non-mining sectors which involved expansion in manufacturing, banking, agriculture, construction and communication. The implication of decline in GDP per capita is lower FDI inflow due to lower potential demand and higher costs due to diseconomies of scale.
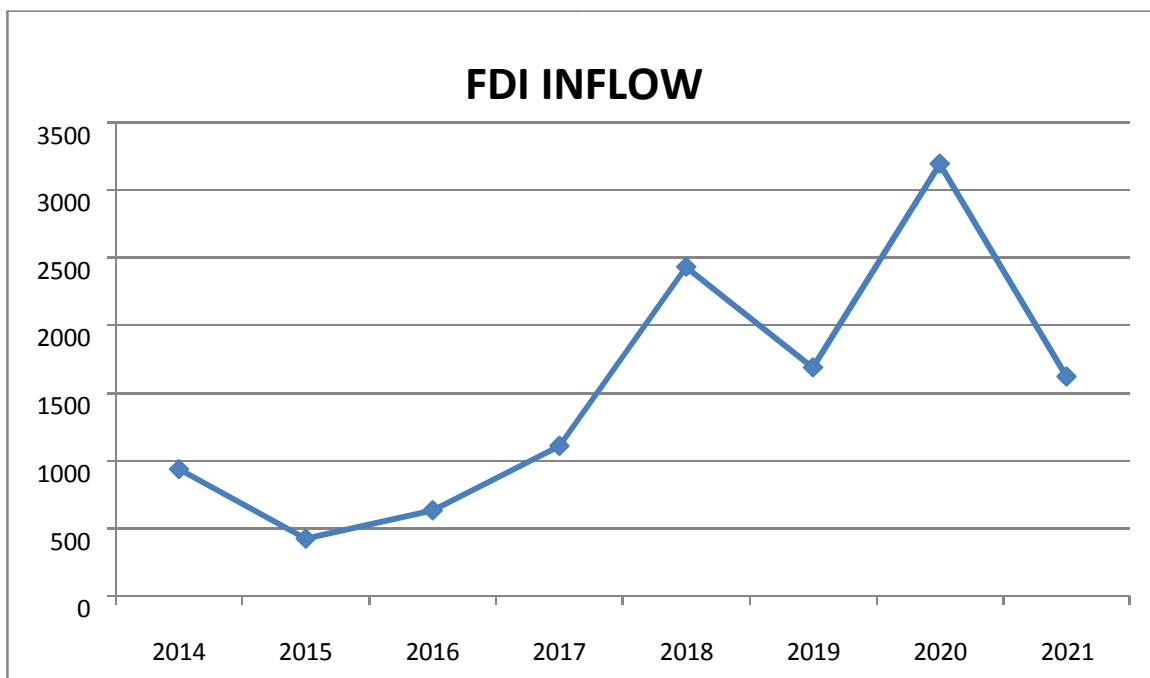
FDI Inflow

According to secondary data collected on FDI inflow, the statistics were as follows:

Table 3: FDI inflow in Zambia in the period 2014-2021 (US$ million)

YEAR	2014	2015	2016	2017	2018	2019	2020	2021
FDI(US$ Million	936.6	425.2	633.9	1109.9	2433.4	1690.5	3194.9	1623.4

Source: Zambia Development Agency (2022).

Figure 3: Net FDI inflow in Zambia

Source: Analysed data (2022).

FDI inflow reduced from US$ 936.6 million in 2014 to US$ 425.2 million. It started increasing steadily from US$ 425.2 million in 2015 to US$ 2433.4 million in 2018.The increase was largely due to increased promotions to attract FDI through provisions of good incentives. In 2019, the FDI inflow reduced to US$ 1690.5 million as a result of the 2019 Covid 19 crisis. In 2020, the FDI inflow increased to US$ 3194.9 million. This increase was driven by higher drawdown in FDI assets.In 2021, it reduced to US$ 1623.4 million as a result of holding back of FDI by investors due to bad economic policies introduced by government and high cost of energy. The implication of the rise in FDI inflow is the increase in economic growth of the country.

**Sectors that attract Foreign Direct Investments in Zambia**

The data collected through documentary review revealed the following as some of the sectors that attract FDI in Zambia: -

Table 4: FDI inflow by Sector (US$ million)

SECTOR	2014	2015	2016	2017	2018	2019	2020	2021
Mining	781.6	367.2	1141.3	955.6	933.7	1375.5	1499.2	946.4
Manufacturing	108.7	285.7	373.9	178.4	469.6	444.2	669.5	424.8
Bank and Institutions	111.5	-83.5	-11.2	70.9	193.6	196.4	258.6	114.8
Wholesale and Retail	80.4	65	-2.2	76.6	38.3	30.5	166.5	75.4
Transport and Communication	67.8	-10.7	179.3	41.6	19.7	5.0	148.8	1.3
Tourism	12.7	40.9	4.3	13.8	0	4.5	66.8	4.40
Agriculture	3.8	-14.1	13.2	31.7	28.3	86.3	139.5	30.8
Real Estate	2.9	-0.4	-4.5	42.8	4.9	23.0	48.8	5.2
Construction	9.2	44.2	17.4	39.2	54.6	0.2	85	3.2
Energy	0	0	0	0	6.5	46.8	71.4	14.8
Others	145.3	0.6	17.8	-59.7	-19.2	2.2	204.6	2.3

Source: Zambia Development Agency (2022).

Figure 4: Sectoral FDI inflow
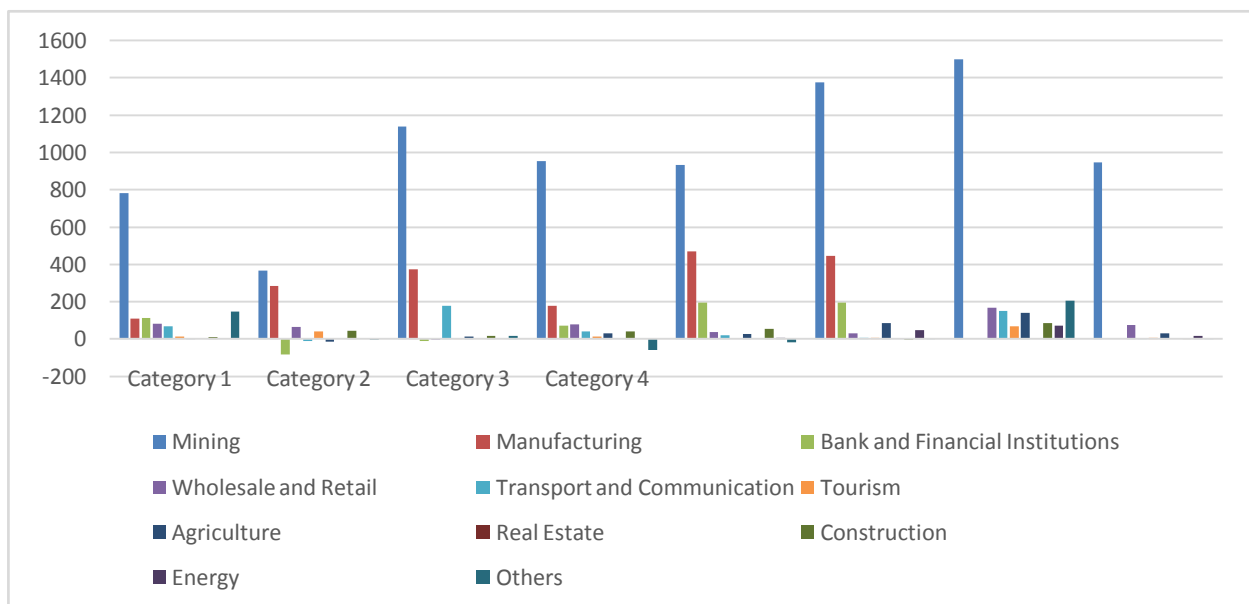
Analysed data (2022).

Mining

FDI inflow in the mining sector reduced from US$ 781.6 million in 2014 to US$ 367.2 million in 2015. It sharply increased to US$ 1141.3 million in 2016 and kept fluctuating slightly until 2019.Between

2019 and 2020 it rose to US$ 1375.5million and US$ 1499.2 million due to favourable copper prices at the international market. In 2020, it fell to US$ 946.4 million. The reason for the fall was due to the Covid 19 pandemic.

Manufacturing

FDI inflow in the manufacturing sector increased from US$ million in 2014 to US$ million in 2016. In 2017, it reduced drastically to US$ 178.4.There was a sharp increase in 2018 to US$ 469.6 million. Between 2018 and 2019, FDI inflow in manufacturing sector reduced from US$ 469.6 million to US$ 444.2 million. It increased to US$ 669.5 million in 2020.It reduced to US$ 424.8 million in 2021 as a result of high interest rates, high electricity cost of and the decline in copper prices.

Banking Institutions

FDI inflow in the banking institutions dropped from US$ 11.5 million in 2014 to US$ -83.5 million in 2015 and US$ -11.2 million in 2016. It increased from US$ 70.9 million in 2011 to US$ 193.6 million in 2012 but had a minimal increase to US$ 196.4 million in 2019. In 2020, it increased to US$ 258.6 million as a result of. In 2021 it reduced to US$ 114.6 million. This reduction was caused by depreciation of exchange rate and high lending interest
rates.

Wholesale and Retail

FDI inflow in wholesale and retail dropped from US$ 80.4 million in 2014 to US$ 65 million in 2015 and US$ -2.2 million in 2016. It increased from US$ 76.6 million in 2017 as the global financial situation normalised and dropped to US$ 38.3 million in 2018, US$ 30.5 million in 2019 as a result of the Covid 19. In 2020, it increased to US$ 166.5 million.In 2021 it fell to US$ 75.4 million. This reduction was caused by high fuel prices and high inflation.

Transport and Communication

FDI inflow in the transport and communication sector reduced from US$ 67.8 million in
2014 to US$ -10.7 million in 2015. It sharply increased to
US$ 179.3 million in 2016.In 2017, it dropped to US$ 41.6 million, US$ 19.7 million in 2018 and US$ 5 million in 2019.In 2020 it rose to US$ 148.8 million. In 2021 it fell to US$ 1.3 million and US$ 4 million. The reason for the fall was due to high fuel prices.

Tourism

FDI inflow in the tourism sector increased from US$ 12.7 million in 2014 to US$ 40.9 million in 2015.In 2016, it reduced drastically to US$ 4.3 million. There was a slight increase in 2017 to US$ 13.8 million and dropped to 0 in 2018. Between 2019 and 2020, FDI inflow in tourism sector rose to US$ 66.8 million to US$ 4.5 million respectively. It increased to US$ 4.8 million in 2021.

Agriculture

FDI inflow in the agriculture dropped from US$ 3.8 million in 2014 to US$ -14.1 million in 2015. It increased from US$ 13.2 million in 2016 to US$ 31.7 million in 2017 but had a minimal decrease to US$ 28.3 million in 2018. FDI inflow had a sharp increase to US$ 86.3 million in 2019 and US$ 139.5 million in 2020. In 2021, it reduced to US$ 30.8 million. This reduction was caused by depreciation of the Zambian kwacha.

Real Estate

FDI inflow in real estate business dropped from US$ 2.9 million in 2014 to US$ -0.4 million in 2015 and US$ -4.5 million in 2016. It increased from US$ 42.8 million in 2017 but had a sharp decrease to US$ 4.9 million in 2018. In 2019 the FDI inflow in real estate increased to US$ 23.0 million and US$ 48.8 million in 2020. In 2021 it reduced to US$ 5.2 million. This reduction was caused by depreciation of Zambian kwacha and high lending interest rates and inflation.

Construction

FDI inflow in the construction sector increased from US$ 9.2 million in 2014 to US$ 44.2 million in 2015.In 2016, it reduced drastically to US$ 17.4.There was a sharp increase in 2017 to US$ 39.2 million and US$ 54.6 million in 2018. In 2019, FDI inflow in construction sector reduced US$ 0.2 million due to the Covid 19. It   increased to US$ 85 million in 2020 and again dropped to US$ 3.2 million in 2021 due to high electricity cost of and inflation.

Energy (Electricity, Gas and Steam)

Data showed that there was no FDI inflow into the energy sector between 2014 and 2017.Between 2017 and 2019 there was an increase from 0 to US$ 48.8 million. In 2020, it increased to US$ 71.4 million. In 2021 it reduced to US$ 14.8 million. This reduction was caused by high fuel cost, high inflation.

Others

FDI inflow in other sectors dropped from US$ 145.3 million in 2014 to US$ 0.6 million in 2015 and slightly rose to US$ 17.8 million in 2016. It decreased to US$ -59.7 million in 2017 and US$ -19.2 million in 2018. In 2019 the FDI inflow in other sectors increased to US$ 2.2 million and US$ 204.6 million in 2020.In 2021 it reduced to US$ 2.3 million. This reduction was caused by high inflation and depreciation of the Zambian kwacha.

An analysis of FDI by sector showed the mining sector was the major recipient of net inflows of FDI followed by the manufacturing sector. The banking and non-banking financial sector (except for 2015) was third while wholesale sector was fourth followed by communication and transport. Agricultural sector's FDI inflow was fluctuating from year to year.

However, notable declines of FDI were recorded in sectors such as real estate, energy, tourism and other sectors.

5.2.2 Determinants of FDI in Zambia

The following are the analyses of statistics of the selected determinants of FDI in Zambia which includes human capital accumulation, infrastructural development, trade liberalisation and economic stability.

Human Capital Accumulation

Human capital accumulation is represented by labour force, tertiary level enrolment per capita and primary school enrolment rate.
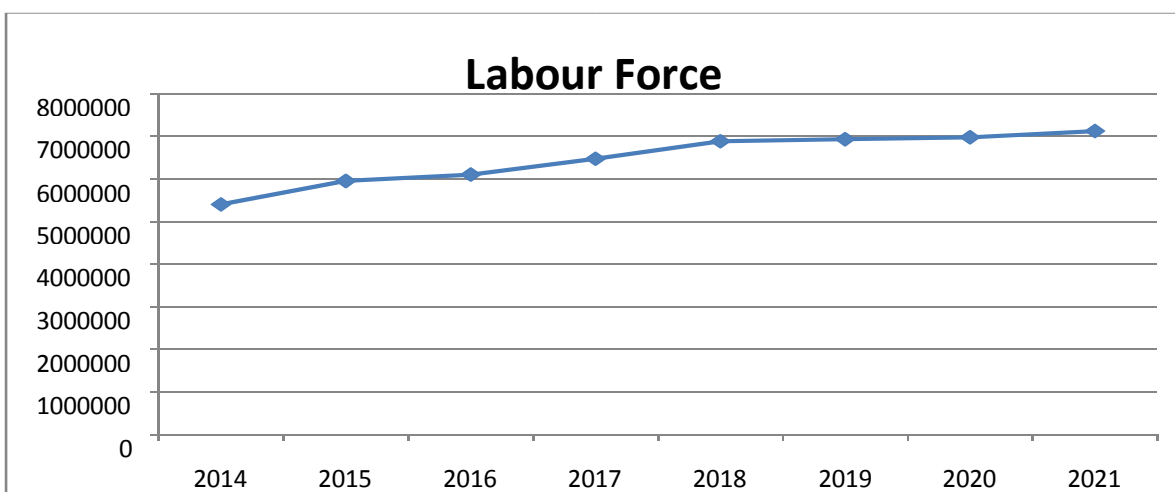
Table 5: Human Capital Accumulation

	2014	2015	2016	2017	2018	2019	2020	2021
Labour Force(million)	5.4	6.0	6.1	6.5	6.9	6.9	7.0	7.1
Tertiary Level Enrolment	25000	33000	37000	40000	42000	44000	47000	50000
Primary School Enrolment Rate (%)	97	100	94	96	97	98	99	100

Source: Central Statistical Office (2022)

### Labour Force

Figure 5: Labour Force

Source: Analysed data (2022)

As shown in figure 5, the number of labour force in the country has consistently increased from 5400000

in 2014 to 7100000 in 2021.The reason for the increase was due to the increase in the number of people entering the labour market as skilled from tertiary institutions or unskilled.
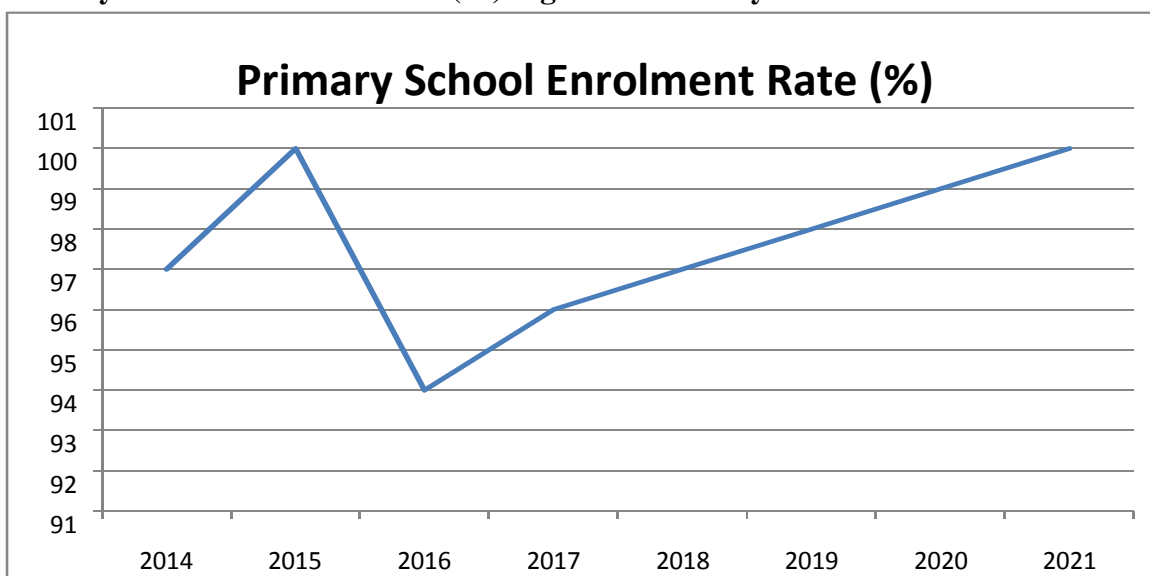
Tertiary Level Enrolment per Capita
Figure 6: Tertiary Enrolment Per Capita.
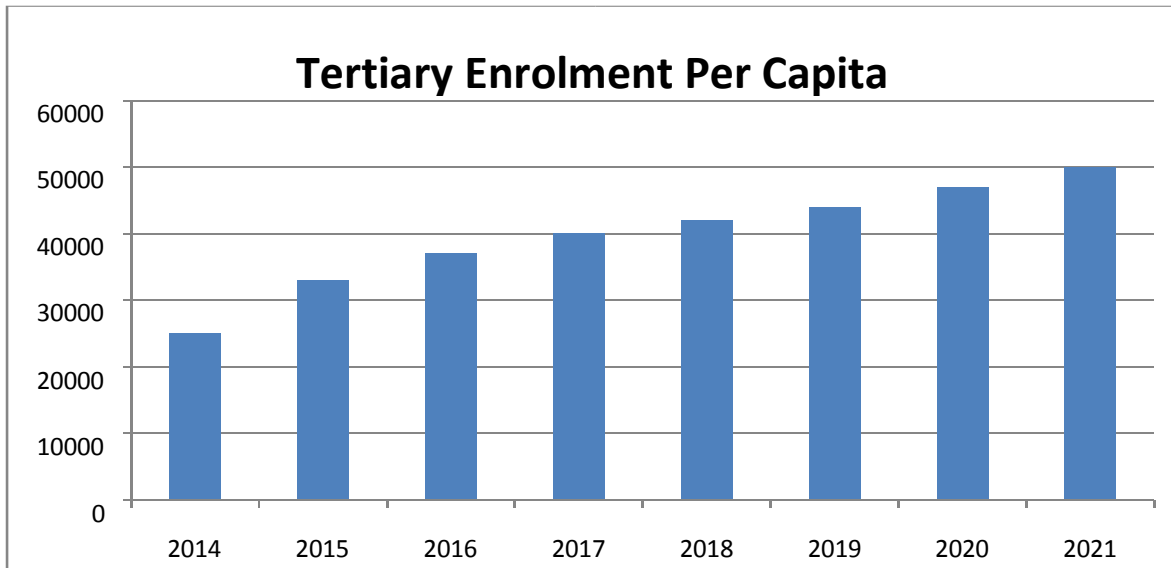
Source: Analysed data (2022).

The analysis of the data shows that the tertiary level enrolment per capita increased consistently between 2020 and 2021 from 25000 to 50000.The increase was due to increased number of tertiary institutions in the country.

Primary School Enrolment Rate (%) Figure 7: Primary School Enrolment Rate.

Source: Analysed data (2022).

The data shows that the number of primary school enrolment rate increased from 97 % in

2014 to 100 % in 2015 and dropped to 94 % in 2016.From 2016,it increased steadily to 100 % in 2021.The increase in number of school enrolment was due the increase in the number of primary schools being built.

The increase of labour force, tertiary level enrolment per capita and primary school enrolment is important for improving skilled manpower in the country which is critical for FDI attraction. More effort should be put in technical education because countries with high levels of skilled labour are likely to be attractive to FDI that is associated with productive seeking FDIs hence, improvement in economic growth.
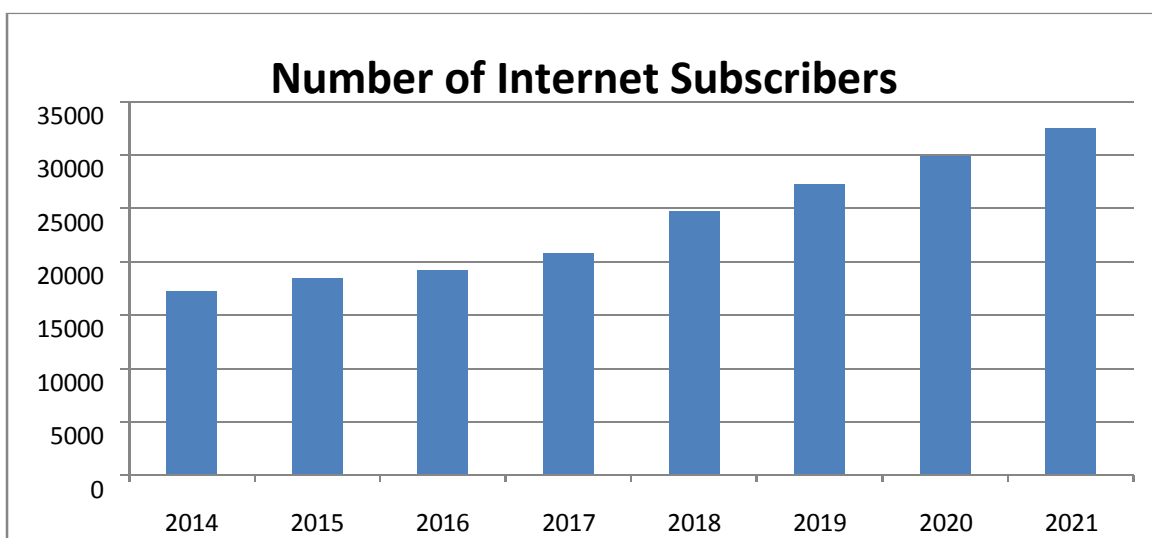
Infrastructural Development

Infrastructural development is represented by number of internet subscribers and the following are its statistics:

Table 6: Number of Internet Subscribers

YEAR	2014	2015	2016	2017	2018	2019	2020	2021
INTERNET SUBSCRIBERS	17200	18500	19250	20800	24700	27300	29900	32500

Source: Central Statistical Office (2022).

Figure 8: Number of Internet Subscribers

Source: Analysed data (2022).

The analysis of the data shows that the number of internet subscribers increased consistently between 2014 and 2021 from 17200 to 32500.The increase was due to increased communication infrastructure in the country.
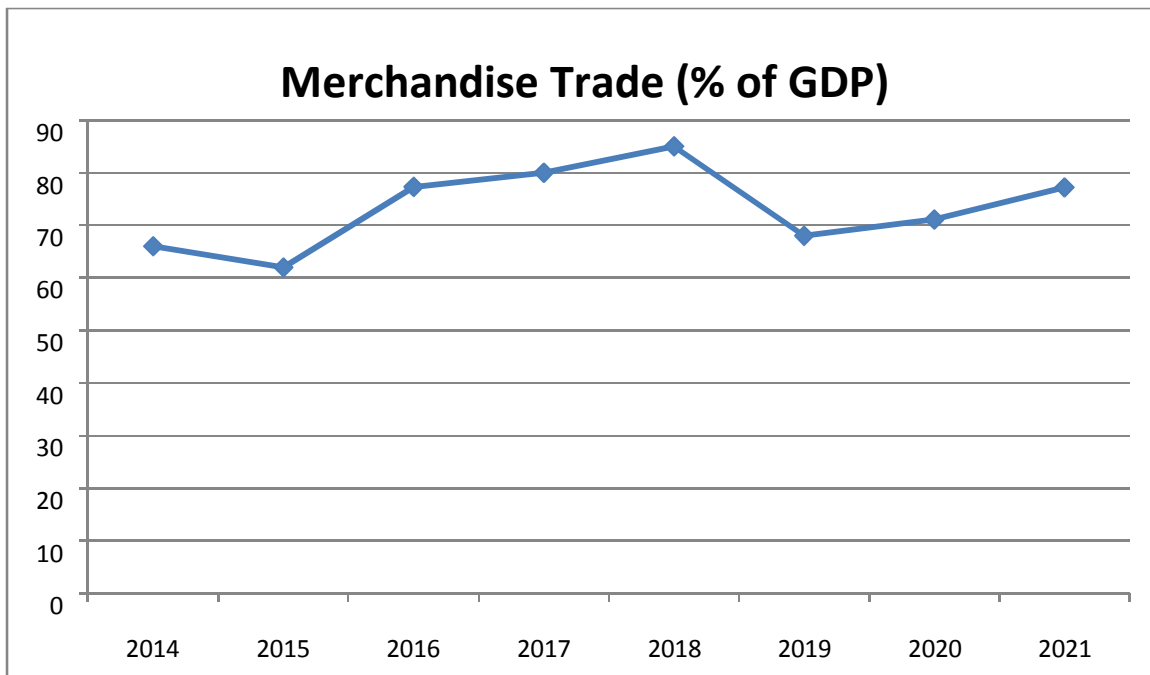
Trade Liberalisation

Trade liberalisation is represented by merchandise trade and the following are its statistics:

Table 7: Merchandise Trade

	2014	2015	2016	2017	2018	2019	2020	2021
MERCHANDISE TRADE (% of GDP)	66	62	77.3	80	85	68	71.1	77.2

Source: Central Statistical Office (2022).

Figure 9: Merchandise Trade

Source: Analysed data (2022).

The data shows that the country's merchandise trade rose from 66 % in 2014 to 85 % in 2018. Both imports and exports of goods and services increased and the increase was attributed to the favourable metal prices on the international markets. Between 2019 and 2020, it again decreased to 68 % and 71.1% of GDP. Both imports and exports of goods and services fell due to the unfavourable metal prices on the international markets. In 2021, the merchandise trade had a favourable rise to 77.2 of GDP in 2021. Both imports and exports of non-copper goods and services increased as a result of shift in investment to non-mining activities like manufacturing and agriculture among others.

Macroeconomic Stability

Macroeconomic stability is represented by rate of inflation and the following are its statistics:

Table 8: Rate of Inflation

YEAR	2015	2016	2017	2018	2019	2020	2021	2021
INFLATION (% increase)	12.45	13.4	8.5	6.43	6.58	6.98	7.81	10.1

Source: Bank of Zambia (2022).

Inflation increased from 12.45 % in 2015 to 13.4 in 2016. In 2017, it reduced drastically to 8.5 % and 6.43 % in 2018. Between 2018 and 2021, inflation increased from 6 .58 % to 10.1 %.The increases was because of the 2020 financial crisis and the decline in copper prices.

Analysis of Primary data

This part of data analysis covers exploratory analysis of data collected using the survey. The tools for collection of data was questionnaire which was distributed to 45 people of various categories, 41 (91 %) of 45 responded, 4 (10 %) respondents out of 45 did not respond.

5.3.1 Descriptive Statistics

First, descriptive statistics about the data collected are tabulated showing the number of respondents, minimum and maximum values mean and standard deviation.

Table 9: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
National income	41	1.00	5.00	3.3659	1.42752
FDI inflow	41	1.00	5.00	3.7073	0.98092
HUMAN CAPITAL	41	1.00	5.00	3.9512	1.28357
INFRASTRUCTURAL	41	1.00	5.00	3.7805	1.33252
			5.00		1.21223
DEVELOPMENT			5.00		1.17857
TRADE LIBERALISATION	41	1.00		3.0732	
ECONOMIC STABILITY	41	1.00		3.7561	
Valid N (listwise)	41				

Source: Analyzed Data, 2022

From Table 12, it can be concluded by looking at the overall maximum and minimum values that there are no extreme values in the sample.

According to the questionnaire, the respondents were asked the question "How are you satisfied with the growth of the economy of Zambia? '' The question was coded with a nominal category (1-5 respectively) of 5.VerySatisfied 4. Satisfied 3. No Basis for Response 2. Dissatisfied 1.VeryDissatisfied.
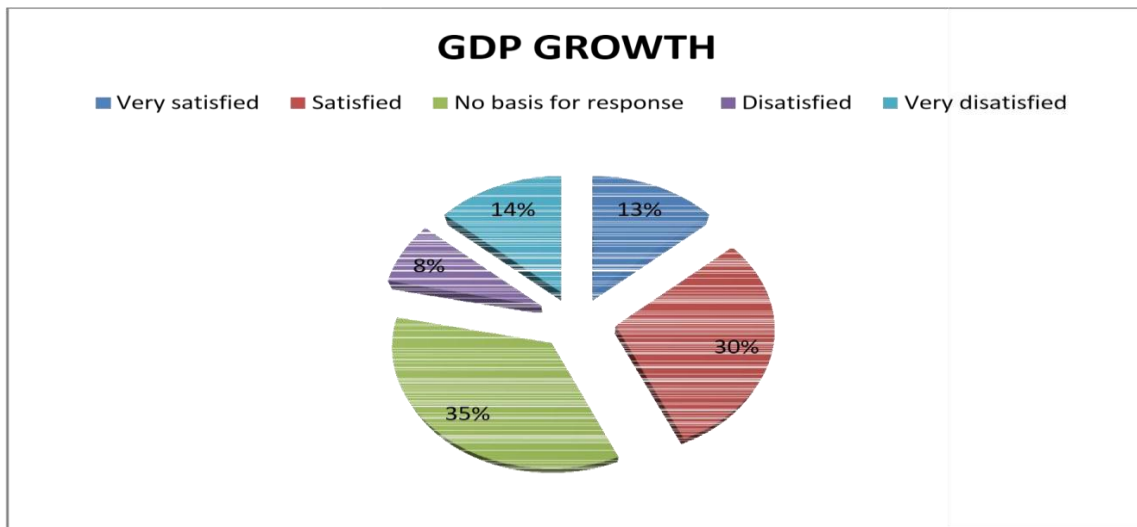
Table 13, below presents the frequencies and mean for the variable.

Table 10: Growth of GDP.

	Very Satisfied	Satisfied	No Basis for Response	Dissatisfied	Very Dissatisfied	Mean
GDP	5	11	13	3	5	3.3659

Source: Analyzed data (2022)

Figure 11: Growth of GDP

Source: Analysed data (2022).

From the above figure, out of 41 respondents 5(13 %) stated that they were satisfied with the growth of GDP, 11 (30%) were satisfied, 13 (35 %) had stated no basis for response, 3(8%) were dissatisfied and 5(14%) were very dissatisfied. The mean 3.3 shows that the majority of the respondents were satisfied that the growth of GDP was positive. Growth of GDP in

Zambia largely emanates from continued FDI in agriculture, construction, transport and storage, communications, forestry and fishing sector.

According to the survey, the participants were asked the question" How would you rate the inflow of FDI in Zambia? "The question was coded with a nominal category (1-5) of Very Poor, Poor, No Basis for Response, Good and Very Good respectively.
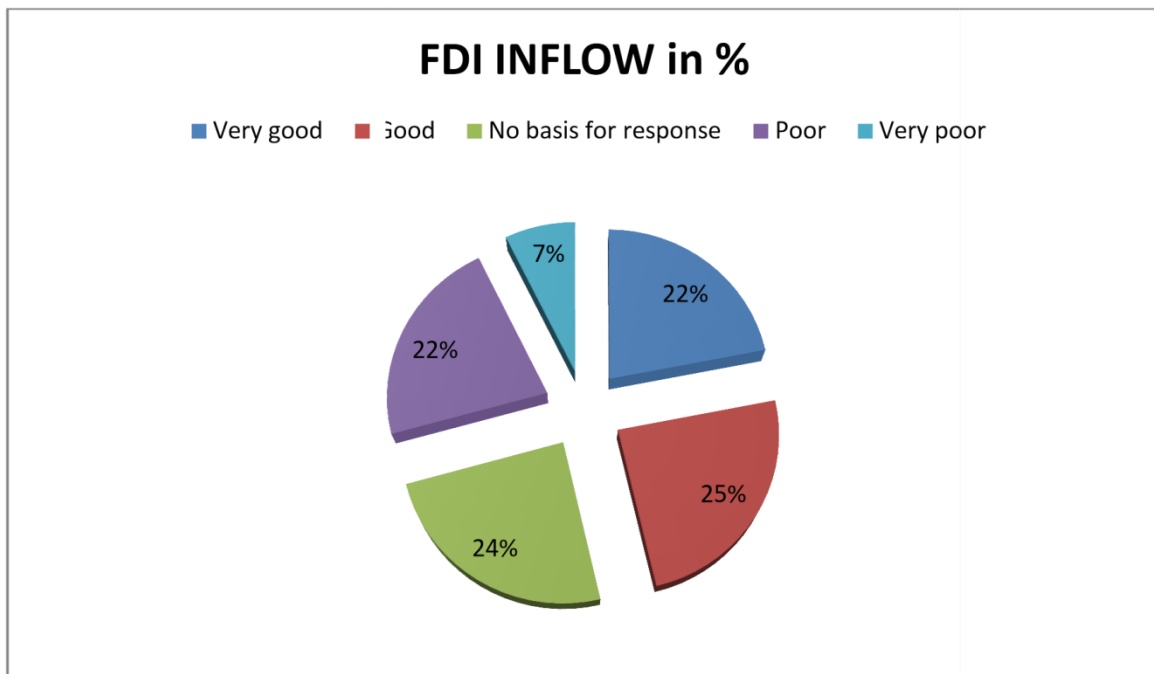
. Table 3 below presents the frequencies and mean for the variable.

Table 11: FDI inflow in Zambia

	Very Good	Good	No Basis for Response	Poor	Very Poor	Mean
FDI inflow	9	10	10	9	3	3.7073

Source: Analysed data (2022).

Figure 12: FDI inflow in Zambia

Source: analysed data(2022)

As shown in the table above, out of 41 respondents 9(22 %) stated that FDI inflow was very good, 10 (24 %) responded good, 10 (24 %) had stated no basis for response, 9 (22%) responded poor and 3(7%) had very poor as their answer. The mean 3.7 shows that the majority of the respondents stated that the inflow of FDI was good. Investment decisions in Zambia are positively influenced by GDP growth culminating in increasing trends in FDI.

According to the survey, the respondents were asked the question" How much do you agree on the following sectors been key in attracting FDIs in Zambia? ".The question was coded with a nominal category (1-5 respectively) of "Strongly Disagree=1, Disagree=2, No Basis for Response=3, Agree=4 or Strongly Agree=5". Figure 5 below presents the mean frequencies for these variables.

Table 12: Sectors attracting FDI in Zambia and frequency scores

Sector	Coding	Mean
Mining	1-5	4.6429
Manufacturing	1-5	4.5
Banking	1-5	3.6429
Wholesale and Retail	1-5	1.8374
Transport and Communication	1-5	1.8810
Tourism	1-5	2.3381
Agriculture	1-5	3.9381
Real Estate	1-5	1.3571
Construction	1-5	1.0905
Energy	1-5	2.4512
Others	1-5	1.2143

Source: Analysed data (2022).

Figure 13: Sectors attracting FDI in Zambia
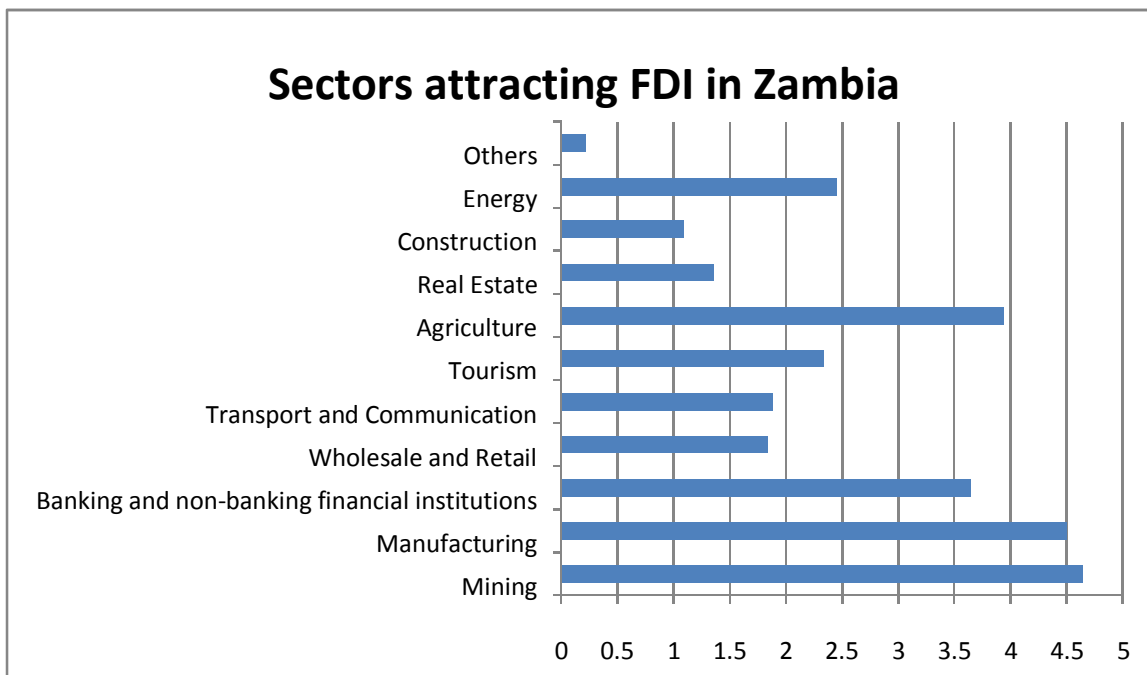
Source: Analysed data (2022).

As shown in Table 2 above, majority of the respondents stated that mining, manufacturing, agriculture and banking and non-banking financial institutions were the sectors that attracted more FDI in Zambia are Mining with as all their mean frequencies are above 3. The rest of the sectors scored below the frequency of 3 .The Zambian government should put more efforts on promotion activities, provision of

investment incentives, and make reforms on investment policies in the sectors with mean below 3 in order to attract more FDI.

According to the survey, the respondents answered questions on the determinants of FDI under heading" To what extent do the following Determinants attract FDI in Zambia?" How much do you agree or disagree with the following statements? "The responses were coded as

"Strong negative =1, Negative=2, No Basis for Opinion=3, Positive=4 and Strong Positive=5".

Table 13 below presents the mean frequencies for these variables

Table 13: Determinants of Foreign Direct Investment and mean frequency.

Determinants	Coding	Mean
Human Capital Accumulation	1-5	3.9512
Infrastructural Development	1-5	3.7805
Trade Liberalisation	1-5	3.0732
Economic Stability	1-5	3.7561

Source: Analysed Data (2022).

Figure 14: Determinants of Foreign Direct Investment
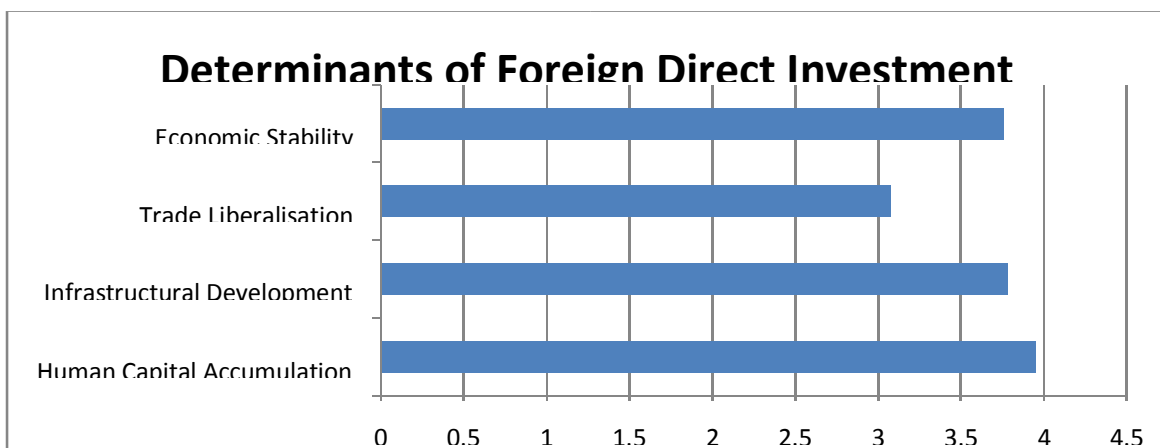
Source: Analysed data (2022).

According to the figure above, Zambia is performing very well in all the above mentioned determinant of FDI mentioned as they all have the mean frequency of above 3. This implies that the locational factors are important in the attraction of investment in Zambia. This further supports the results of eclectic theory (Dunning, 2008) which stated firms get attracted to invest in a country due to locational characteristics of the host country.

Respondents answered the question on contribution of FDI under heading" How are you satisfied with the contribution of FDI to Zambia's economy considering the following?" The question was coded with a nominal category (1-5 respectively) of Very Dissatisfied, Dissatisfied, No Basis for Opinion, Satisfied

or Very Dissatisfied. Figure 5 below presents the mean frequencies for these variables.

Table 14: The contribution of FDI to Zambia's economy

Concept	Coding	Mean
Employment Creation	1-5	4.1429
Technological Transfer	1-5	3.5
Skills Development	1-5	3.6429
Capital Formation	1-5	3.2381
Improvement of Living Standards	1-5	3.3810
An increase of Government Revenue.	1-5	3.7381

Source: Analysed data (2022).

Figure 15: The Contribution of FDI to Zambia's Economy
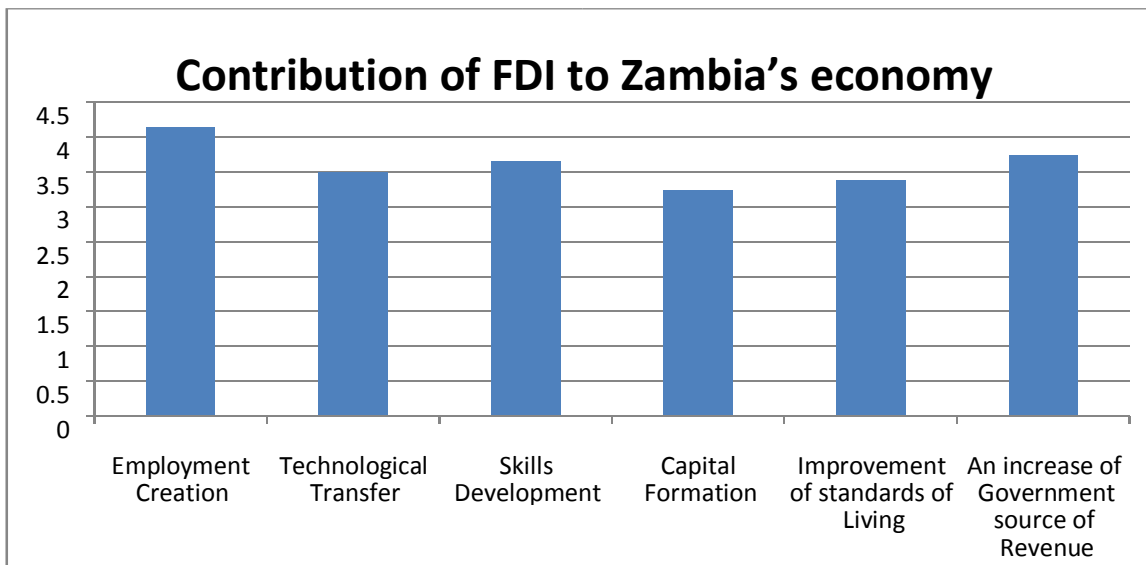
As shown in figure, Majority of the respondents were satisfied with the contribution of FDI as all the mean frequencies are above 3. FDI positively contributed to employment creation, technological transfer, skills development, capital formation, improvement of living standards of citizens, and an increase of government source of revenue.

Regression Results

The data collected in relation to the determinants of FDI in Zambia is analysed using correlation and regression models.

Correlations

After the analysis of the descriptive statistics, results were run and no detection of extreme values were

present. A regression analysis was done in order to answer the main research question of this paper and therefore evaluate the hypotheses.

To start with, the correlation coefficients between the independent and the dependent variables are presented in table 15.

Table 15: Correlations

	FDI Inflow	Human Capital	Infrastructural Development	Trade Liberalisation	Macroeconomic Stability	GDP
FDI inflow Pearson Correlation	1	.341*	.307	.440**	.402	.387*
Sig. (2 tailed) N	41	.029 41	.051 41	.004 41	.009 41	.012 41

* means the variable is statistically significant at 0.05 level (2-tailed)* * means the variable is statistically significant at 0.01 level (2-tailed)

Source: Analysed Data (2022).

Variable Effect Regression

The first step in the estimation of a linear relationship is the model testing in order to find out the characteristics of the data.

Table 16: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.630[a]	.396	.310	.81468

Source: Analysed Data (2022).

Table 17: ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	15.258	5	3.052	4.598	.002[b]
Residual	23.229	35	.664		
	38.488	40			
Total					

Source: Analysed Data (2022).

Table18 presents the regression coefficients for the contemporary model and which was used for the discussion of the result.

Table 18: Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.300	.570		2.281	.029
	.293				
HUMAN CAPITAL	-.103	.126	.311	2.327	.026
INFRASTRUCTURE	.329			-.434	.667
		.237	-.085		
TRADE				1.709	.096
		.193	.319		
LIBERALISATION	.181	.207	.184		.389
	.202	.105	.263		.063
ECONOMIC STABILITY				.872	
GDP				1.918	

Source: Analysed Data (2022).

Interpretation of Results

The results in tables 16 and 17 indicate that the model was statistically significant. The goodness of the model is indicated by its R2 value of 0.396 or 40.0% .The total variation in the observed role of FDI is wholly explained by the variations in GDP, trade liberalisation, infrastructural development and macroeconomic stability up to 40.0%, the remaining 60.0% is accounted for by the disturbance term. The overall significance of the model was also tested using the f-statistics. Here the significance of the statistics value of 4.598 and p=0.002 (p<0.05) confirmed that the predictability of the model did not occur by chance; it actually confirmed that the model fitted the data well.

Hypothesis one

H1: GDP growth significantly affects FDI inflow in Zambia.
H0: GDP growth does not significantly affect FDI inflow in Zambia.
The above results shows that GDP is positively related to FDI. The responsiveness of GDP to FDI to 0.202 indicates that a one percent increase in FDI leads to a more than proportionate increase of 0.202 percent in GDP.

A correlation coefficient of 0.387 indicates a very moderate relationship between GDP and FDI, thus leading to the acceptance of our alternative hypothesis which states that there is a relationship between FDI and GDP and rejection of our null hypothesis.

However, tests of the hypothesis were done using p value and t-statistics.

P Value test

Decision Rule Accept H0: if p > 0.05.
Reject H0: if p < 0.05.
From the regression result, p = 0.063. Since the p value is greater than 0.05, the alternative hypothesis is rejected and the null hypothesis is accepted. It therefore implies that GDP does not exert a significant impact on FDI inflow in Zambia.

T-Statistics test

Decision Rule

Accept H0: if calculated t-statistics value < table t-statistics value.'
 Reject H0: if calculated t-statistics value > table t-statistics value.
From the regression result, Calculated t-statistics value = 1.918
Table t-statistics value =2.281
Since the calculated t-statistics value of 1.918 is less than the table t-statistics value of 2.281 at 5% level of significance, we reject the alternative hypothesis and accept the null hypothesis. It therefore means that GDP does not significantly affect FDI inflow in Zambia.

Hypothesis two

H1: Human capital accumulation exerts a significant impact on FDI inflow in Zambia.

H0: Human capital accumulation does not exert any significant impact on FDI inflow in Zambia.

The above result shows that human capital accumulation is positively related to FDI. The responsiveness of human capital accumulation to FDI to 0.293 indicates that a one percent increase in FDI leads to a more than proportionate increase of 29.3 percent in GDP.
A correlation coefficient of 0.341 indicates a very moderate relationship between human capital accumulation and FDI, thus leading to the acceptance of our alternative hypothesis which states that there is a relationship between FDI and human capital accumulation and rejection of our null hypothesis.

However, tests of the hypothesis were done using p value and t-statistics.

P Value test

Decision Rule
Accept H0: if p>0.05.

Reject H0: if p<0.05.

From the regression result, p = 0.026. Since the p value is lesser than 0.05, the alternative hypothesis is accepted and the null hypothesis is rejected. It therefore implies that human capital accumulation exerts a significant impact on FDI inflow in Zambia.

T-Statistics test

Decision Rule

Accept H0: if calculated t-statistics value < table t-statistics value.'

Reject H0: if calculated t-statistics value > table t-statistics value.

From the regression result, calculated t-statistics value = 2.327

Table t-statistics value =2.281

Since the calculated t-statistics value of 2.327 is greater than the table t-statistics value of 2.281 at 5% level of significance, we reject the null hypothesis and accept the alternative hypothesis. It therefore implies that human capital accumulation exerts a significant impact on FDI inflow in Zambia.

Hypothesis three

H1: Infrastructural Development exerts a significant impact on FDI inflow in Zambia

H0: Infrastructural Development does not exert any significant impact on FDI inflow in Zambia.

The result shows that infrastructural development is negatively related to FDI. The responsiveness of infrastructural development to FDI to -0.103 indicates that a one percent increase in FDI leads to a more than proportionate decrease of 10.3 percent in gross GDP. A correlation coefficient of 0.307 indicates a very moderate relationship between infrastructural development and FDI, thus leading to the acceptance of our alternative hypothesis which states that there is a relationship between FDI and infrastructural development and rejection of our null hypothesis.

Moreover, tests of the hypothesis were done using p value and t-statistics.

P Value test

Decision Rule

Accept H0: if p> 0.05.

Reject H0: if p<0.05.

From the regression result, p = 0.667. Since the p value is greater than 0.05, we reject the alternative hypothesis and accept the null hypothesis. It therefore implies that infrastructural development does not exert a significant impact on FDI inflow in Zambia.

T-Statistics test

Decision Rule

Accept H0: if calculated t-statistics value < table t-statistics value.'

Reject H0: if calculated t-statistics value > table t-statistics value.

From the regression result, calculated t-statistics value = -0.434

Table t-statistics value =2.281

Since the calculated t-statistics value of -0.434 is less than the table t-statistics value of 2.281 at 5% level of significance, we reject the alternative hypothesis and accept the null hypothesis. It therefore means that infrastructural development does not significantly impact

FDI inflow in Zambia.

Hypothesis four

H1: Trade Liberalisation exerts a significant impact on FDI inflow in Zambia.

H0: Trade Liberalisation does not exert any significant impact on FDI inflow in Zambia.

The above result is that trade liberalisation is positively related to FDI. The responsiveness of FDI to trade liberalisation to 0.329 indicates that a one percent increase in trade liberalisation leads to a more than proportionate increase of 32.9 percent in foreign direct investment.

A correlation coefficient of 0.440 indicates a very moderate relationship between FDI and FDI, thus leading to the acceptance of our alternative hypothesis which states that there is a relationship between FDI and trade liberalisation and rejection of our null hypothesis.

However, tests of the hypothesis were done using p value and t-statistics.

P Value test

Decision Rule

Accept H0: if p> 0.05.

Reject H0: if p<0.05.

From the regression result, p = 0.063. Since the p value is greater than 0.05, the alternative hypothesis is rejected and the null hypothesis is accepted. It therefore implies that trade liberalisation does not exert a significant impact on FDI inflow in Zambia.

T-Statistics test

Decision Rule

Accept H0: if calculated t-statistics value < table t-statistics value.'

Reject H0: if calculated t-statistics value > table t-statistics value.

From the regression result, calculated t-statistics value = 1.709

Table t-statistics value =2.281

Since the calculated t-statistics value of 1.709 is less than the table t-statistics value of 2.281 at 5% level of significance, we reject the alternative hypothesis and accept the null hypothesis. It therefore means that trade liberalisation does not significantly impact FDI inflow in Zambia.

Hypothesis five

H1: Macroeconomic stability exerts a significant impact on FDI inflow in Zambia.

H0: Macroeconomic stability does not exert any significant impact on FDI inflow in Zambia.

The result shows that macroeconomic stability is positively related to FDI. The responsiveness of GDP to FDI to 0.181 indicates that a one percent increase in macroeconomic stability leads to a more than proportionate increase of 18.1 percent in FDI. A correlation coefficient of 0.402 indicates a very moderate relationship between macroeconomic stability and FDI, thus leading to the acceptance of our alternative hypothesis which states that there is a relationship between FDI and macroeconomic stability and rejection of our null hypothesis.

However, both p value and t value tests produced statistically insignificant results.

P Value test
Decision Rule
Accept H0: if $p > .05$.
 Reject H0: if $p < 0.05$.
 From the regression result, $p = 0.389$. Since the p value is greater than 0.05, the alternative hypothesis is rejected and accept the null hypothesis. It therefore implies that macroeconomic stability does not exert a significant impact on FDI inflow in Zambia.

T-Statistics test

Decision Rule

Accept H0: if calculated t-statistics value < table t-statistics value.'
 Reject H0: if calculated t-statistics value > table t-statistics value.
From the regression result, calculated t-statistics value = 0.872
Table t-statistics value = 2.281
Since the calculated t-statistics value of 0.872 is less than the table t-statistics value of 2.281 at 5% level of significance, we reject the alternative hypothesis and accept the null hypothesis. It therefore means that macroeconomic stability does not significantly impact FDI inflow in Zambia.

CONCLUSION

Discussion of Findings

The determinants of FDI inflow to Zambia have been studied. From the study's results FDI inflow to Zambia is explained by human capital accumulation. The study showed in all the tests that human capital accumulation has a positive and significant effect on FDI inflow. This result suggests that the

labour force available in Zambia is already existing with the necessary threshold of technical education to stimulate efficiency and skilled seeking FDIs.

The results also showed that there is no causal relationship between FDI and the remaining variables which includes GDP, infrastructural development, trade liberalisation and macroeconomic stability. The study indicated that the growth of GDP is positive and significant in correlation and the regression result was positive and insignificant. The growth of GDP is insignificant due to incapability by the country to have reasonable levels of disposable income which attracts FDI for market seeking opportunities. It was discovered that correlation findings for infrastructural development were positive and significant. However, the regression findings were negative and insignificant. Infrastructural development's inverse and insignificant impact can be explained by the low levels of development of infrastructure in Zambia. The study further revealed that trade liberalisation had positive and significant results in correlation while OLS was insignificant. A sensible justification is that Zambia has not achieved the required threshold in trade liberalisation to fully attract FDI. The study finally showed that the correlation for macroeconomic stability had positive and significant effect while regression results were positive and insignificant. The insignificant effect of macroeconomic stability could be as a result of inflation in the country which was tremendously unstable, and varied highly across the years.

Managerial Implications

A number of managerial implications are deduced from these empirical findings. First, the findings revealed that there is no meaningful relationship between GDP and FDI in Zambia. The Zambian government must progress with programmes that build its image and introduce policies aimed at attracting right FDI which is aimed at supporting economic growth. Such a policy will not only promote FDI but have both direct and indirect positive effects on the prosperity of the economy.

The outcome also revealed that there is inverse relationship between infrastructure and FDI. The infrastructural development in Zambia should be considered keenly if FDI is to be attracted into Zambia. Lack of infrastructural development may lead to negativity in production which may result in less FDI attraction. The Zambian government needs to embark on capital projects, which are aimed at enhancing the infrastructural facilities with which foreign investors can build on.
Trade liberalisation is found to have a positive relation with FDI stock level. If the government want to increase FDI, it should introduce policies which impact the economy to attract meaningful FDI through higher level of openness and internalization. Lastly, to attract more FDI into the country, the Zambian government needs to uplift its economic stability. Macroeconomic stability is a major concern for potential foreign investors. The government needs to introduce more friendly macroeconomic policies which will improve the business environment hence attracting FDI into all the sectors of the economy.

Contributions of the Study

 In addition to the practical implications this article also contributed existing literature. This study contributed to the current understanding of the FDI-EG nexus. The holistic analysis of this study added to existing research by identifying the variables that influence both FDI and economic growth in Zambia. To holistically analyse these variables in the Zambian case has not been done before.

Acknowledgements

REFERENCES

1. Addo, M. and Eboh, W. (2014). Qualitative and Quantitative Research Approaches. In Ruth Taylor (Editor), The Essentials of Healthcare.

2. Botezatu, M. Coanca, M. (2020). Innovative Calculations Model for Evaluating Regional Sustainable Development. Economic Computation and Economic Cybernets Studies and Research, 54(3), 5-24.

3. Brulhart, M, Dihel, N. and Kukenova, M. (2015). More than Copper: Toward the Diversification and Stabilization of Zambian Exports. Policy Research working paper Series 7151, The World Bank, Washington, DC.

4. Cantwell,J.(2015). An Introduction to the Eclectic Paradigm as a Meta-Framework for Cross-Disciplinary Analysis of International Business,London and New York:Palmgrove-Macmillan.

5. Casson,M. and Wadeson,N.(2018).Emerging Market Multinationals and Internalisation Theory, International Business Review,Vol.27,issue 6,1150-1160.

6. Chukuemeka, O.(2015). An Overview of Endogenous Growth Model: Theory and Critique. International Journal of Physical and Social Sciences.

7. Cicea, C. and Marines, C. (2020). Bibliometric Analysis of Foreign Direct Investment and Economic Growth Relationship, Journal of Business Economics and Management, 22(2),445-466.

8. Creswell, John W. and J. David Creswell.(2018). Research Design: Qualitative, Quantitative, and Mixed Methods Approaches. 5th edition. Thousand Oaks, CA: Sage, 2018.

9. Davis, D. A., and Craven, C. (2016). Feminist Ethnography: Thinking through Methodologies, Challenges, and Possibilities. Rowman & Littlefield.

10. Dinh,T., andNguyen, T. C. (2019). Foreign Direct Investment and Economic Growth in the Short Run and Long Run: Empirical Evidence from Developing Countries.*Journal of Risk and Financial Management*, 12(4),176.

11. Dunning, J. and Lundan, M. (2008). Institutions and the OLI paradigm of the Multinational Enterprise. Asia Pacific Journal of Management, 25, 573-593.

12. Elfil M., Negida A. (2017). Sampling Methods in Clinical Research: An Educational Review. Emergency, 5 (1), Article e52, 1–3.

13. Felber,C. and Teitscheid,T. (2021). From Neo Classical Economics to Common Good Economics, Sustainability,13(4),2093

14. Farrell, R. (2008). Japanese Investment in the World Economy: A Study of Strategic Themes in the Internationalisation of Japanese Industry. Britain: Edward Elgar.

15. Goh, S. K., Sam, C. Y., Macnown, R. (2017). Re-Examining Foreign Direct Investment, Export and Economic Growth in Asian Economies. Bootstrap ARDL test for Co-integration. J Asian Econ.51:12-22.

16. Hagan, E. and Amoah, A. (2019). Foreign Direct Investment and Economic Growth Nexus in Africa New Evidence from the New Financial Fragility Measure. African Journal of Economics and Management Studies.

17. Hill, C. and Mckaing, T. (2015). Global Business Today (4th Canadian ed.) Toronto: McGraw. Hill Ryerson.

18. Jensen, N., Biglaiser, G., Li, Q., Malesky, E. (2012). Politics and Foreign Direct Investment-books.google.com

19. Khobai, H. Hamman, N., Mkhombo, T., Mhaka, S., S. Mavikela, N. and Phiri, A. (2018). The FDI-Growth Nexus in South Africa: Re-examination using Quantile Regression Approach. Stadia Universities Babes-Bolyai Oeconomica,63(3),33-55.

20. Lee, M., Tcha, M. (2014). The Colour of Money: The Effects of Foreign Direct Investment on Economic Growth in Transition Economies. Review of World Economics,140:211-229.

21. Le Hoang and Ba Huyen (2015). Determinant of the factors affecting Foreign Direct Investment (FDI) flow to Thanh Hoa province in Vietnam. Procedia - Social and Behavioural Sciences, 172, pp. 26 – 33.

22. Maliwa, E. and Nyambe, J. (2015). Investigating the impact of FDI on Economic Growth in Zambia: 1980 –2012. Business, Economics and Accountancy, 3(3), pp.41.

23. Michele,A.(2021).Paul Rosenstein-Rodan and the Birth of DevelopmentEconomics,History of Political Economy,53(5):857-892.

24. Mohd, S. and Muse, A. (2021). Impact of Foreign Direct Investment on Economic Growth in Ethiopia: Empirical Evidence. Latin American Journal of Trade Policy,4(10),56-77.

25. Nayak,D. and Choudhury,R.(2021). A Selective Review of Foreign Direct Investment Theories,Asia-Pacific Research and Trading.

26. Noyef,A.,Said,A.,Dhuha(2016).Testing the FDI Hypothesis of Location Advantage in the case of Kuwait, The Journal of Applied Business Research,Vol. 32,Number 2.

27. Nguyen, C. (2020). The Impact of Foreign Direct Investment, Aid and Exports on Economic Growth in Vietnam. Journal of Asian Finance, Economics and Business,7(10),581-589.

28. Nketiah-amoonsah, E. and Sorpong, B.(2019). Effect of Infrastructure and Foreign Direct Investment and Economic Growth in Sub Saharan Africa. Global Journal of Emerging Market Economies,1-19.

29. Olorogun, Lukman, Monsurat Ayojimi Salami, and Festus Victor Bekun. (2020). Revisiting the Nexus between FDI, Financial Development and Economic Growth: Empirical evidence from Nigeria. Journal of Public Affairs 2020: e2561.

30. Omair, A. (2014). Sample size estimation and sampling techniques for selecting a representative sample. Saudi Commission Journal of Health Specialties, 2, 142-147. doi:10.4103/1658-600X.142783.

31. Owusu-Antwi G. (2012). Determinants of Foreign Direct Investment: Is it a better prescription for Economic Growth in Africa? International Business and Economic Research Journal, 11(7), pp. 757-770.

32. Phuyal, R. and Sunuwar, S. (2018). A Sectoral Analysis of Foreign Direct Investment on Economic Development of Nepal. Journal of Business and Social Sciences Research,3(1),1-12.

33. Sahraoui ，M.，Belmokaddeu，M.，Guelli，M.，Ghouali，Y.（2015）. Causal Interactions between FDI and Economic Growth: Evidence from Dynamic panel co-Integration, Procedia Economics and Finance,23, pp.276-290.

34. Salam A, Tufail S.(2016) Competitiveness and Comparative Advantage of Important Food and Industrial Crops in Punjab: Application of Policy Analysis Matrix. Journal of International Agricultural Trade and Development. 10:81–94.

35. Sasi, I. (2016). The Foreign Direct Investment-Economic Growth Nexus. International
    a. Review of Economics and Finance, 42, pp. 116-133. 74.

36. Taherdoost, H. (2016). Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research. International Journal of Academic Research in Management, 5, 18-27. doi:10.2139/ssrn.3205035.

37. Turkovic,M.(2017). The Effect of Capital Formation on Economic Growth in Iran: Testing Various Theories with an ARDI Model,Sarajevo Business and Economic Review.35:205-14.

38. Umoru,D. and Onimawo,J.(2018).Policy and Big Push Theory of Development in Nigeria:Moving Away from Low Level Economic Equilibrium,Organisation and Management,Vol.16.

39. World Bank (2014). World Development Indicators. Washington DC, USA.

40. Yin, R.K. (2015). Qualitative Research from Start to Finish. NY: The Guilford Press.

41. Zandile, Z., and Phiri, A. (2019). FDI as a Contributing Factor to Economic Growth in Burkina Faso: How true is this?. Global Economy Journal, 19(01), 1950004

42. Zangoei, S., Salehnia, N., and Khodaparast Mashhadi, M. (2021). A Comparative Study on the Effect of Alternative and Fossil Energy Consumption on Economic Growth and Foreign Direct Investment in Selected Countries using SUR Approach. Environmental Science and Pollution Research, 28(16), 19799–19809.

43. Zhu,L.,Gang,Q.,Liu,Y. and Yan,Z.(2017).The Impact of Foreign Direct Investment on SO emissions in Beijin Tianjin-Hebei Region, A Spartial Economic Analysis, Journal of Cleaner Production,166,189-196.