



MAKERERE UNIVERSITY BUSINESS SCHOOL

DETERMINANTS OFFOREIGN DIRECT INVESTMENT INFLOWS IN UGANDA

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A DISSERTATION SUBMITTED TO THE DIRECTORATE OF RESEARCHAND GRADUATE TRAINING IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF DEGREE OF MASTER OF ECONOMIC POLICY AND MANAGEMENT OF MAKERERE UNIVERSITY

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DECLARATION

I, the undersigned, hereby declare that this thesis is my original work and has not been submitted to any other institution for similar purposes. Where other studies have been used, acknowledgments have been made.

Signature

Date: 20/12/2021

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APPROVAL

This is to certify that this thesis has been submitted for examination with our approval as Supervisors

Mr. Anthony Olyanga

DEDICATION

This dissertation is dedicated to the almighty God who has been with me from day one to date, my beloved family; Mum Irene Kakande, my wife Bernadette Nakalanda, my son Jayden kakande and all those who encouraged me with love and thanks.

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ABSTRACT

In the progression towards economic growth, countries consider investment as a critical feature in raising productivity levels by boosting technological progress and reducing the unemployment rate. In recent years, the Government of Uganda has enacted policies to entice Foreign Direct Investment (FDI) in the view of creating more jobs and bolstering the economy. However, the performance of FDI has registered mixed understanding of trends with oscillations rather than a clear growth trajectory. One would then wonder, what could be the determinants of FDI inflows in Uganda.

A longitudinal research design comprised of a 29-year time series was used with inflation rate, interest rate, Balance of Payment, GDP percapita and exports serving as the determinates of FDI inflows in Uganda. Several diagnostics tests were conducted. Johansen test for cointegration which revealed that the long run relationship exists amongst the variables. Pearson Correlation technique was used to establish the level of relationship between the macro economic factors and FDI inflows. Vector Error Correction Model was constructed to determine the contribution of these variables to FDI inflows.

Results from the study revealed that Inflation, exports, interest rate and GDP percapita determine the FDI inflows in Uganda. Foreign investment is driven by the size of GDP percapita of Uganda, implying that investors target more domestic market. An average of 6% inflation rate is desired by foreign investors in Uganda. And, a high interest rate of Uganda attracts more FDI inflows meaning that investors require a safe and stable business environment. It was also found that balance of payment is statistically insignificantly related to FDI. This means that the relationship could actually be by chance. Government is therefore urged to;

- i. Devise mechanisms and policies that target improving percapita income of the population. This will increase the market size hence more FDI inflows.
- ii. Monetary policy should target maintain inflation rate at 6.4%. This is highly required to support foreign investments.
- iii. Target import substitution and provision of incentives for investors that target export market to attract more export oriented FDI into the economy.

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LIST OF ABBREVIATIONS

BoU	Bank of Uganda
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
INF	Inflation
BoP	Balance of Payment
INT	Interest Rate
GIN	Government Incentives
UNCTAD	United Nations Conference on Trade and Development
PP	Phillips Perron
ADF	Augmented Dickey Fuller
VAR	Vector Autoregressive Model
NDP	National Development Plan
ECM	Error Correction Mechanism
VECM	Vector Error Correction Model
OLS	Ordinary Least Squares
ARCH	Autoregressive Conditional Heteroscedasticity
UIA	Uganda Investment Authority
MoFPED	Ministry of Finance Planning and Economic Development
BTTB	Background to the Budget
GoU	Government of Uganda
UFZA	Uganda Free zones Authority
PoU	Parliament of Uganda

SECTION ONE INTRODUCTION

1.0 Introduction:

This section describes the background, the problem statement, purpose, the objectives, research hypotheses, significance, the conceptual framework, justification and the scope of the study.

1.1 Background

Foreign Direct Investment (FDI) has been recognized as an important resource for economic growth in developing countries. Many scholars have argued that the flows of FDI fills the gap between desired investments and domestically mobilized savings, increase tax revenue, create jobs, improve management and labor skills in host countries (Todaro and Smith, 2003; Hayami, 2001).

There are several channels through which FDI inflows influence economic growth in developing countries. The most important channel being technological diffusion from developed to developing countries (Borensztein et al, 1997). This diffusion has been found to take place through the importation of high-technology products, adoption of foreign technology, acquisition of human capital through various means, and research and development (R&D) by multinational corporations (MNCs) (Borensztein et al, 1997). Thus, the growth rate in developing countries is a 'catch-up' process that involves copying and implementing these technologies (Mwilima, 2003).

The eclectic theory of Dunning (1981) explains that FDI inflows are determined by three sets of advantages. Besides specific ownership and internalization advantage, which target foreign country should offer to an investor a specific location advantage? The latter may take the form of economic advantage (low prices for production factors, GDP per capita, inflation, interest rates, BoP, export values, infrastructure, geographical location, economic stability), social advantage (cultural and language proximity), or political advantage (political stability, free trade, pro-investment policy). The objective of this study is to identify the determinants of FDI inflows in Uganda primarily focusing on the economic determinants of FDI.

Many African Governments have put a lot of measures (sometimes called "sweeteners") to ensure that their economies remain attractive to FDI. For the example, Republic of Rwanda, Kenya, Ethiopia, and Egypt have established an investment Board to facilitate investments, liberalized their economies to attract investments and joined trade blocks such as the EAC, COMESA to increase markets for investors. Besides, many African countries have restored and maintained macroeconomic stability through the devaluation of overvalued currencies, and reduction of inflation and budget deficits (UNCTAD, 1998). To boost investor's confidence, they have established Investment Promotion Agencies (IPAs) and affiliated to multilateral agencies such as World Association of Investment Promotion Agencies (WAIPA) among others, some of which are widely respected as successful agencies that adopt state-of-the-art practices in all areas of promotion (Tillett, 1996).

Uganda also embraced FDI inflows as a significant feature of its economic outlook. Given its importance, one of Uganda's biggest challenges has been how to attract FDI inflows, sustain it and ensure that it contributes to economic growth. Since 1990, Uganda has witnessed a large number of FDI inflows, which have been due to the response to policy reforms adopted by the Government (UIA performance report, 2016). For instance, UIA was established in 1990 to support investors, One-Stop Center was established in 2014 to ease investor facilitation, established 7 industrial parks have been established, UFZA was established in 2014 to facilitate EPZs for investors, ensured war- free political climate maintained and targets inflation in single digit in the NDP II, and provided fiscal policy incentives to attract FDI inflows (BTTB, 2017).

Although FDI inflows stocks have been on a positive trajectory in Uganda since 1991, Uganda has failed to sustain this trend. FDI inflows stocks are oscillating between 0.1% and 6% of GDP between 1994 and 2018. FDI stocks increased from 0.03% in 1991 to 3.1% in 1998 to 2.1% in 2002, peaked to 6.4% in 2007 and reduced to 2.5% in 2015 and 4.8% in 2018 (WDI, 1990-2019). Main sectors affected are Mining and quarrying including oil (33%) wholesale & retail (30.6%), finance & insurance (23.9%) and manufacturing (11%) (Private sector competitiveness survey 2017). This fluctuating performance raise questions on what could be the factors determining FDI inflows in Uganda?

Although the debates over the determinants of FDI inflows in developing countries such as Uganda are decades old, there is no clear evidence that shows how the FDI inflows changes relative to the economic dimensions of GDP per capita, inflation, interest rates, BoP and exports. Several studies such as Ndawula, 2013, Semwanga, 2011, Boateng, 2015, Senkuku & Gharlegh, 2015 have all looked at the different determinants of FDI. None of them has looked at a combination of GDP per capita, Inflation, Interest rates, BoP and exports as determinates of FDI inflows in Uganda. Additionally, some studies such as Semwanga, 2011 & A. M Senkuku, 2015 used panel data that suffered from data inadequacy. This study intends to contribute to the existing knowledge through examining the determinates (GDP, Inflation, Interest rates and corporate taxes) of FDI inflows in Uganda using time series which is considered long enough to make meaning full conclusions.

1.2 Statement of the problem

Just like other Saharan African countries, Uganda has very low savings, low tax revenue and low investment. For example, tax contribution to GDP is at 14.4% (UBOS 2018) which is far less than the estimated average of 20% for sub-Saharan Africa. Taxes from goods and services have remained the main source of GoU revenue with their share to total revenue being only 38% in the FY 2017/18 (BTTB, 2018). GDP per capita is projected at USD 775 by 2020 which is far below the NDP II target of USD 1039 (WB report 2019).

GoU committed to this and ensured economic stability and consequently, inflation has been and is projected at a single digit, GDP per capita is rising and is a projected to USD1039, interest rate reduction to 20% project to 13- 15%, less volatile exchange rate, and export value growth. (NDP II). Relatedly, UIA and UFZA were established to support investors and consequently, over 7 industrial parks have been commissioned, business registration time reduced from 5 days to less than an hour and doing business ranking at 116 out of 190 economies.

Conversely, FDI inflows have been increasing with Uganda ranked 79th out of 187 economies FDI inflows (Knoema, 2017). However, FDI inflow stocks have been oscillating between 0.1% and 6% of GDP between 1994 and 2018. FDI stocks increased from 0.03% in 1991 to 3.1% in 1998 to 2.1% in 2002, peaked to 6.4% in 2007 and reduced to 2.5% in 2015 and 4.8% in 2018. (WDI, 2018).

The situation shows that Uganda has failed to attract and sustain FDI inflows. Therefore, it is not known whether economic policies are needed to improve this situation. This study intends to investigate the determinants of FDI inflows in Uganda.

1.3 Purpose of the study

The study seeks to investigate the determinants of Foreign Direct Investment Inflows (FDI) and examines the extent to which these determinants impact FDI inflows in Uganda.

1.4 Objectives of the study

The study aims at examining the:

- i. To investigate the key determinants of Foreign Direct Investment inflows in Ugandan context.
- ii. To examine the level of performance of FDI inflows in the Ugandan context.
- iii. To examine the contribution of the determinants of FDI inflows in the Ugandan context.

1.5 Research Questions

- i. What are the determinants of FDI inflows in the Ugandan context?
- ii. What is the level of performance of FDI inflows in the Ugandan context?
- iii. What is the contribution of the determinants on the FDI inflows in the Ugandan context?

1.6 Scope of the study

The scope of the study will be determined in two forms namely; geographical scope and time scope.

1.6.1 Geographical scope

The study will be conducted focusing on Uganda's economy.

1.6.2 Time scope

The study covers a long-run period (1990-2018) covering the start of the economic reforms in the economy. This 27-year period marks the start of Uganda's entering into regional trade agreements to boost its growth in the economy.

1.7 Significance of the study

- i. Study findings will shade a picture of the determinants of FDI inflows with the view of providing in-depth information relevant enough for policy development.
- ii. Its findings will guide policymakers especially MOFPED, BoU, and PoU in the design and implementation of efficient policies to promote the growth of FDI inflows.
- iii. The research finding will guide researchers and policy analysts on the right policy options to take in the drive to promote and sustain more FDI inflows in the economy.

1.8 Conceptual Framework

Independent Variables: Economic Indicators

Dependent Variable: FDI Inflows



The conceptual framework has been adopted and modified from Md. M. Ali, 2017. It explains that FDI inflows are determined by the GDP per capita, level of interest rate, inflation rate, the exchange rate and export value of the economy. The same model will be used to study the determinants of FDI inflows in Uganda.

SECTION TWO LITERATURE REVIEW

2.0 Introduction

In this section, we review the theoretical and empirical literature dealing with the determinants of foreign direct investment inflows. The conclusions of various research findings of the subject matter are also highlighted in this section.

2.1 Determinates of Foreign Direct Investment Inflows

Theories of FDI can be splited into two groups: micro-level determinants of FDI and macro-level determinants of FDI. The micro-level theories of determinants of FDI try to provide answers to the question why multinational companies prefer opening subsidiaries in foreign countries rather than exporting or licensing their products, how MNCs choose their investment locations and why they invest where they do. The macro-level determinants deal with the host countries situations that determine the inflow of FDI.

2.2.1 Micro-level Theories of FDI Inflows

2.2.1.1 The Early Neoclassical and Portfolio Investment Approaches

The neoclassical hypothesis of development depends on the idea of diminishing returns. As per Samuelson (1975), the law of diminishing returns alludes that an expansion in a few data sources with respect to other settled contributions to a given condition of innovation will make add up to yield increment, yet after a point the additional yield coming about because of similar options of additional information sources is probably going to end up plainly less and less. However, if the two information sources are expanded at a similar rate, there may be steady returns to scale as instead of diminishing returns, where all elements develop in adjust and all economies of extensive scale creation have just been acknowledged (Samuelson, 1975). At the point when economies of scale are being acknowledged, no matter how you look at it increment in the components of generation will really bring about expanding returns and not diminishing returns

(Jon, 2001). If increasing returns to scale dominate in the economy as opposed to diminishing returns then foreign investors should concentrate. The theory relates to this study since it explains the investment concept. Foreign direct investment is the dependent variable of this study

The Two-Gap Model

This model by Chenery and Strout (1966) supports the Harrold-Domar model which states that the rate of economic growth depends on the savings level and capital-output ratio (Cheung, 2013). According to this model, there exist two gaps in the economy; savings-investments gap and import-export or foreign exchange gap. The first gap is between the level of savings in any particular economy and the level of investment that is necessary for growth. This implies that if the level of savings is low, firms and individuals are unable to borrow and invest. The second gap is one between foreign exchange earnings and the amount of imports required in production. This suggests that foreign capital inflows can have a multiplier effect on investment and growth. Capital inflows are thus required to fill this gap on condition that investment incentives are favorable. In addition a shortage of foreign exchange can reduce economic growth by constraining both imports and savings (Kabete, 2008). Most developing countries, Kenya included, suffer from insufficient savings and/or foreign exchange earnings among other factors that hinder growth. In relation to this study, Kenya should aim at maximizing the level of savings that will ultimately lead to increased investments. Industrialization should also be increased and majorly through foreign direct investment with an aim of reducing the country's current account deficit.

2.2.1.2 The Product Life Cycle Theory of FDI

This theory was first developed by Vernon in 1966. A new product is first produced and sold in home market. At the early stage, the product is not standardized; that is, per unit costs and final specification of the product are not uniform. As the demand for the product increases, the product will be standardized. When the home market is saturated, the product will be exported to other countries. The firm starts to open subsidiaries in locations where cost of production is lower, when the competition from the rival firms intense and the product reaches its maturity. Therefore, FDI is the stage in the product lifecycle that follows the maturity stage (Dunning, 1993). Vernon's product life cycle theory is a dynamic theory because it deals with changes

overtime. However, it seems that the theory is not confirmed by empirical evidence, as some multinational companies start their operations at home and abroad simultaneously (Chen, 1983).

2.2.1.3 The Eclectic Theory of FDI

John Dunning developed an eclectic theory of FDI, which is called *OLI paradigm*. O, L and I refer to Ownership advantage, Location advantage and Internalization conditions, respectively.

Operating in a foreign country market has many costs and these "costs of foreignness" include a failure of knowledge about local market conditions, cultural, legal and many other costs. Therefore, foreign firms should have some advantages that can offset these costs. Ownership advantage is a firm specific advantage that gives power to firms over their competitors. This includes advantage in technology, in management techniques, easy access to finance, economies of scale and capacity to coordinate activities.

Unlike ownership advantages, location advantages are country specific advantages. Transnational Companies (TNCs) in order to fully reap the benefit of firm specific advantages, they should consider the location advantage of the host country. The latter may take the form of economic advantage (low prices for production factors, GDP per capita, inflation, interest rates, BoP, export values, infrastructure, geographical location, economic stability), social advantage (cultural and language proximity), or political advantage (political stability, free trade, pro-investment policy).

Consequently, the location advantage of the host country is one essential factor that determines the investment decision of TNCs. Internalization is multinational companies' ability to internalize some activities to protect their exclusive right on tangible and intangible assets, and defend their competitive advantage from rival firms. Accordingly, all the three conditions must be met before transnational companies open a subsidiary in a foreign country.

2.2.2 Macro-level Determinants of FDI

The macro-level determinants of FDI include any host country's situations that affects the inflow of FDI, such as market size, the economic growth rate, GDP, exchange rate, level of inflation, interest rate, infrastructure, natural resource, the political situation among others.

2.2.2.1 The size of Domestic Market

The size of the domestic market is a fundamental determinant of FDI. The wealth and development of a country can be used as proxy to measure the size of the domestic market. Most commonly, per capita income (PCI), which is an indicator of effective demand, is used to measure the size of local market. In addition to PCI, the GDP of a country and the population size are also used as indicators to measure the size of local market. However, if a firm is exportoriented and not market seeking, the size of domestic market will not be an important determinant of FDI (Odongo, 2012, Root and Ahmed, 1979). A large market can help firms producing tangible products to achieve scale and scope economies. The domestic market growth rate which is measured in terms of population and GDP growth rate also determines the inflow of FDI into a country (UNCTAD, 1998).

2.2.2.2 Level of Inflation

Inflation is the long term rise in the prices of goods and services caused by the devaluation of currency. The level of inflation rate in the host country is a key determinant of FDI inflows, as it reduces the purchasing power of the population, affecting the level of demand of goods and services hence deterring the flow of FDI. Nnadi and Soobaroyen (2015) and Andinuur (2013) observed that inflation is a measure of macro-economic instability and that higher inflation rate could chase away prospective and already existing foreign investors. Inflation rate increase in host country reduces FDI as it erodes the value of the profits made by foreign firms (Kunafiwa, 2018, Sayek, 2009, p. 423). Low inflation reduces nominal interest rates and consequently pushes down the cost of capital for foreign investors (Kunafiwa, 2018).

On the contrary, Obiamaka et al (2011) noted that it is possible that inflation in the host country can have a positive impact on FDI inflows on condition that it does not exceed a certain threshold level. A healthy rate of inflation is considered a positive because it results in increasing wages and corporate profitability and keeps capital flowing in a presumably growing economy. As long as things are moving in relative unison, inflation will not be detrimental.

Yasmin, Hussain and Chaudhary (2003) conducted a study on factors affecting foreign direct investment in less developed countries. The study sampled 15 developing countries5 of which were from upper middle,5 from lower middle and 5 from lower income countries. The study used panel data model to make its conclusions. The study found that inflation, current account among some other noneconomic factors affect FDI significantly in low income countries.

Awan and Zaman (2010) examined the impact of inflation rates on FDI inflows in Pakistan. The study findings found that inflation rates caused positive and significant effect on FDI inflows in Pakistan. The study presents a geographical gap since it was done in Pakistan. Further, there exists a conceptual gap since the study did not address all the objectives of the current study.

FDI as it erodes the value of the profits made by foreign firms (Sayek, 2009, p. 423) and (3) low inflation reduces nominal interest rates and consequently pushes down the cost of capital for foreign investors. On the contrary, Obiamaka et al (2011) noted that it is possible that inflation in the host country can have a positive impact on FDI inflows on condition that it does not exceed a certain threshold level.

2.2.2.3 Level of Interest rate

An interest rate is the amount of interest due per period, as a proportion of the amount lent, deposited or borrowed. The total interest on an amount lent or borrowed depends on the principal sum, the interest rate, the compounding frequency, and the length of time over which it is lent, deposited or borrowed. Keynes and Fisher (1936) emphasizes on the importance of interest rates in investment decisions. A fall in the interest rates leads to a decrease in the cost of investment relative to the potential yield. A firm will only invest if the discounted yield exceeds the cost of the project.

Ahmed and Mayowa (2010) studied the determinants and impacts of foreign direct investment in Nigeria from 1970 to 2009. The study utilized the Vector Error Correction Model (VECM) and also the Granger causality techniques to make its conclusions. The study found that macroeconomic variables such as interest rates, exchange rates, inflation and openness of the economy are among the main factors that determine the inflow of FDI in Nigeria.

Luther (2014) conducted a study on the causality analysis of FDI, exchange rate and interest rate volatility in Ghana. The study employed Vector Autoregressive (VAR) model and Granger causality test to reach its conclusions. The study stipulated that interest rate volatility directly affects exchange rate and market attractiveness which in turn affects FDI in the long run. The study also established that stable exchange rate improves FDI inflow and that high FDI inflow improves stability of exchange rate in the country. The study reveals a conceptual gap since it did not address all the objectives of the proposed study.

Singhania (2011) argues that interest rates are normally adjusted to reflect changes in inflation. As a result, interest rates are critical determinants of foreign direct investment since investors will shop for low cost credit sources or lower interest rates and invest it in economies that are promising higher returns.

2.2.3 Level of Exchange rate

Exchange rate is the rate at which one currency is exchanged for another. It is also regarded as the value of one country's currency in relation to another currency. Ordinary equilibrium exchange rate between two currencies that are inconvertible is defined by their purchasing power ratios; thus the exchange rate is likely to be conventional at the equality point between the PPs of the currencies (Ebiringa & Anyaogu, 2014). The Purchasing Power Parity theory, proposes that in the nonexistence of a market structure that is competitive and the nonexistence of transport costs, tariffs, quotas and other trade obstacles, trade and arbitrage in goods markets in effect ought to certify price that are identical across different countries (Rehman & Rehman, 2012).

Schnabl (2007) examined the impact of exchange rate volatility on economic growth on small open economies at the European Monetary Unity (EMU) periphery. The study employed a panel data of 41 countries in the EMU periphery from 1994 to 2005. Volatility was captured as a yearly average of monthly percentage exchange rate. The researcher performed Generalized

Least Squares (GLS). The findings revealed that exchange rate volatility has negative impact on economic growth. The study concluded that macroeconomic stability is necessary to maintain the peg since stable exchange rate positively influences economic growth. The study presents a contextual gap since it focused on economic growth while the current study will focus on FDI.

Walsh and Yu (2010) in their paper analyses various macroeconomic, developmental, and institutional/qualitative determinants of FDI in a sample of emerging market and developed economies. FDI flows into the primary sector showed little dependence on any of these variables, however, secondary and tertiary sector investments were affected in several ways by countries' income levels and exchange rate valuation, as well as development indicators such as financial depth and school enrollment, and institutional factors such as judicial independence and labor market flexibility. The study also found that the effect of these factors often differs between advanced and emerging economies. This study presents a contextual gap since it focused on emerging and developed economies while the proposed study will focus on Uganda, which is a developing economy.

Rates of exchange can affect the allocation of this investment spending across a series of countries and also the total amount of foreign direct investment that takes place. Expected moves in the exchange rate may be shown in a larger charge of funding the project of investment, since IRP settings align expected rates of returns that are risk-adjusted across countries (Goldberg, 2007)

2.2.2.4 Level of Exports

Exports are the goods and services produced in one country and purchased by residents of another country. It doesn't matter what the good or service is. It doesn't matter how it is sent. It can be shipped, sent by email, or carried in personal luggage on a plane. If it is produced domestically and sold to someone in a foreign country, it is an export. Exports are one component of international trade. The other component is imports. They are the goods and services bought by a country's residents that are produced in a foreign country. Combined, they make up a country's trade balance.

MNEs are increasingly seen as capable of helping their host countries in promoting their manufacturing exports. The country experiences with respect to the role of MNEs in export promotion, however, vary a great deal (Kumar and Siddharthan, 1997).

The increase in FDI inflow has an impact on the country's export performance. The government should maintain its policy of attracting FDI and also undertake policy interventions that will boost the linkage between FDI and exports to realize optimal benefits from the inflow of FDI (M. Odong, 2012).

2.2 Performance of Foreign Direct Investment Inflows

According to Maxwel, 2012, Uganda is a front-runner in Africa for inward FDI. Flows to Africa during 1993-1997 increased by about 54 percent over the preceding five-year period, 1988-1992, of which Uganda has been one of the major beneficiaries.

The recent trend dates back in the year 1990 when the country began recording remarkable improvements in capital inflows. The year 2009 had marked an exponential rise of FDI inflows to USD 799 million, and the trend have continued to grow steadily reaching USD1.67 billion in the year 2010. This has been as a result of bilateral ties between Uganda government and Asian investors (UIA, 2010). Figure below show the trend of FDI inflows to Uganda from 1990 to 2018. The vertical axis is the amount of FDI inflows in million USD while the horizontal axis is years.

Figure showing the FDI inflow trend 1990-2018



Source: Uganda Investment Authority, 2018

The accumulated FDI stock in Uganda reached USD 200 million in 1998, increasing from USD 4 million in 1990 (see figure above). During 1992-1996, the ratio of FDI inflows to gross fixed capital formation reached 10.3 per cent, surpassing not only the average for Africa but also the average performance of all developing countries (UNCTAD, 1998). Much of Uganda's successes in the late 90s have been due to policies that promoted macroeconomic stability and good governance. Reforms carried out in the financial sector, marketing, taxation, restructuring of government ministries, privatization and divesture, rehabilitation of infrastructures, return of Asian's properties, and the re-establishment of security of persons and properties. Currently, creation of facilitating agencies such as Private Sector Foundation Uganda in 1995, Uganda Investment Authority (a one-stop-shop for investors) in 2001, creation of Uganda Free Zones Authority in 2014 with revised investment code, joining of regional blocks such as EAC, COMESA, SADC, discovery of new resources such as oil, cobalt, gold etc; and inclusion of several tax incentives in various budget reading FY 2019/20 for export-oriented industrialization contributed heavily to the current upward trend.

Data from Private Capital Survey conducted by UBOS in 20015 indicates that by 2014, the total FDI inflows to Uganda were composed of 51 percent inform of equity capital, 12 percent inform of reinvested earnings, and 37 percent inform of net intercompany loans. However, preliminary estimates from 2007 survey suggest a change in this trend in 2003 with capital equity and reinvested earnings rising to about 80 percent and 26 percent respectively while net

intercompany loans dropping to about -6 percent, indicating a net outflows inform of payments of intercompany loans taken in the previous periods.

On gross basis, FDI inform of intercompany loans contributes the largest share of FDI amounting to about 56 percent of the total inflows compared to 38 percent from equity capital. Indeed, this is the case for most developing countries where the intercompany loans exceeds equity capital due to higher return associated with it partly explaining the rapidly growing private sector debt. The rise in retained earnings in 2003 has been attributed to by financial, insurance and business service sector due to the high profitability of the financial

Sector more especially the banking industry. The rise in equity capital has been due to increased investment in wholesale, retail and catering which contributed to 20 percent to the total equity capital inflows; financing, business and service sector which in turn contributed 13 percent and the manufacturing sector which contributed about 7 percent of total equity capital (M. Ogwal, 2012).

The source of FDI inflows shows that most FDI in Uganda is predominantly from the United Kingdom. The large portion of FDI inflows from UK and the contribution from Canada is largely due to the political decision of the President of Uganda to allow the expelled Asians during Amin's regime to return to Uganda and repossess their properties, most of which were manufacturing industries and real estate's properties. Their return accompanied by the rehabilitation and injection of capital in their repossessed properties has contributed significantly to FDI inflows to Uganda. (M. Ogwal, 2012).

There is compelling evidence that FDI in Africa has been attracted by largely one or more of the following factors significantly determining the sectoral contribution: specific location advantage, host country policies, recent economic and structural reforms, and natural resources. The major recipient sectors of foreign direct investment during 2018 were mining and quarrying accounting for 28.2 percent (or Shs.668.7 billion) of the total FDI. This was followed by finance & insurance (24.7 percent or Shs.585.0 billion), Electricity & gas (19.9 percent or Shs.471.8 billion), and manufacturing (10.7 percent or Shs.254.1 billion). There were however net reductions recorded for enterprises involved in education (Shs.18.3 billion), administrative services (Shs.15.5 billion), accommodation & food (Shs.2.9 billion) and water supply (Shs.0.7

billion). The reductions were mainly due to retained losses and net repayments of affiliated debt during the period. (PSIS, 2019).

2.3 Combined Effect of Inflation, Interest rates, exchange rate and exports on FDI Inflows

B. Emmanuel &Y.Alhasan, 2019 examined the Effect of Exchange and Interest Rates on Foreign Direct Investment in Nigeria and concluded that there is a positive relationship between Exchange Rate and Foreign Direct Investment (FDI). The long run co-integrating equation shows that a negative relationship exit between Interest Rate and Foreign Direct Investment (FDI) and Inflation was negatively related to Foreign Direct Investment (FDI) in the long-run.

A.Omankhanlen, 2011 investigated on the effect of exchange rate and inflation on foreign direct investment and its relationship with economic growth. Its main objective is to find the effect of inflation and exchange rate and the bidirectional influences between FDI and economic growth in Nigeria. The study revealed that FDI follow economic growth occasioned by trade openness which saw the entry of some major companies especially the telecommunication companies, while Inflation has no effect on FDI. However exchange rate has effect on FDI.

H. Sharifi & M. Mirfatah investigated the impact of Exchange Rate Volatility on Foreign Direct Investment in Iran and concluded that gross domestic product, openness and exchange rate to have positive relationship with foreign direct investment but, world crude oil prices and volatility of exchange rate have negative relationship with foreign direct investment. The empirical results obtained in this paper recommend the economy Politicians in Iran to implement exchange rate policies that promote stability of exchange rate, which could help reduce exchange rate volatility in order to attract more FDI.

N. Musyoka used a flexible accelerator model to investigate the effect of real interest rate, inflation, exchange rate and competitiveness on foreign direct investment in Kenya and the study concluded that real interest rates and exchange rates have negative and significant influence on foreign direct investment inflows. Further, the study concluded that competitiveness has a positive and significant influence on foreign direct investment inflows to Kenya. However, inflation was found to have insignificant influence on FDI. Based on the results the most

significant factor affecting FDI inflows was competitiveness, followed by interest rates and then exchange rate.

2.4 Summary of the Literature Review

This section of this study examined the different theories advanced for foreign direct investments including the neo classical theory, eclectic paradigm theory and product life cycle theory. This chapter further examines the various FDI inflows determinants to include Inflation, interest rates, exchange rates, and exports. The chapter also presented empirical studies of the previous studies done by other researchers on the topical areas of economic performance (interest rates, inflation, exports, and exchange rate) and FDI inflows.

From the empirical review, it is evident that few studies including Walsh and Yu (2010), Ahmed and Mayowa (2010) and Yasmin, Hussain and Chaudhary (2003) have been carried out to investigations on determinates of FDI inflows in various developing countries and concluded that real interest rates and exchange rates have negative and significant influence on FDI inflows, competitiveness, trade openness exports have a positive significant impact on FDI. In addition, previous studies have mostly considered determinants of FDI inflows generally without studying specific determinants of FDI inflows into the country as a whole while taking into account the time series data of a lap of 28 years from 1990 to 2018. Further, there is existing conceptual gap and time scope gap since previous studies did not exhaust all the objectives under this study. They also did not consider the 28 year time series proposed in this study.

SECTION THREE METHODOLOGY

3.0 Introduction

This section provides the methodology of research that will be used in this study. We discuss the research design, data sources and the data treatment. This chapter is divided into three parts, namely: data collection methods, data analysis and empirical framework. In order to ensure the statistical accuracy of our research, we will perform several diagnostic tests in order to check our data.

3.1 Research Design

A research design is the set of methods and procedures used in collecting and analyzing measures of the variables specified in the research problem (Kirumbi, (2018). We adopted a longitudinal research design to establish the determinants FDI inflows in Ugandan context.

Firstly, we performed unit root testing on our time series data to determine the stationarity of the data. Augmented Dickey Fuller (ADF) test was chosen to check for the stationarity of the series. This was important because if the variables proved to be non-stationary after running the tests, the usage of said variables in a time series model would lead to spurious results which is invalid and cannot be trusted. Therefore, we also tested for co-integration of the variables via the use of the Johansen-Juselius test in order to determine the existence of either a short or long run relationship exists between the variables.

Finally, the diagnostic checking that we used include the Jarque-Bera test for normality of the residuals, Breusch-LM test for autocorrelation of the variables, rules of thumb to test for presence of perfect Multicollinerity, the Autoregressive Conditional Heteroscedasticity (ARCH) test and Grauger- causality test to test for presence of double causality effect amongst the variables. Following these tests, we constructed a Vector Error Correction (VECM) model in order to capture the linear interdependence among different periods of time within the variables in the short run. This is so because, the variables were co-integrated.

Sources of Data

Data collection is a process of collecting information from all the relevant sources to find answers to the research problem, test the hypothesis and evaluate the outcomes. This study will be conducted using time series data from World Bank data bank and Bank of Uganda.

3.2 Diagnostic tests

4.3.1 Model Specification Test

RAMSEY RESET Test was conducted to test whether the model contain any specification errors and correctly specified. However, Ramsey RESET test was only limited to check the functional form of the variables under study. . ovtest

Ramsey RESET test using powers of the fitted values of FDIinflowsGDP Ho: model has no omitted variables F(3, 22) = 0.65

Prob > F = 0.5918

The results revealed that the model is fully specified implying that there are no omitted variables in the model.

4.3.2 Unit Root test

Unit root tests are used to check for the stationarity of the data series before estimating the relationships between the dependent variable and its explanatory variables. The testing of the stationarity of economic time series is of great importance since standard econometric analysis assumes stationarity in the time series and yet the series are sometimes non-stationary (Engle and Granger, 1987).

Ho: Series are not stationary

Ha: Series are stationary

The Augmented Dickey Fuller (ADF) test was used to test the stationarity of data series and the results revealed that all the variables had test statistics smaller than the critical values at 5% level of error. This then implies that we cannot reject Ho. And conclude that all variables are not stationery.

To address this, a first differencing technique was used on all the variables and the results from the ADF test now revealed that the series are stationary hence can be used for regression and forecasting.

4.3.3 Auto correlation Test

Autocorrelation occurs when the successive residuals are correlated. The Breusch-Godfrey serial correlation Lagrange multiplier test was used to test for autocorrelation. The results are presented in table below,

. estat bgodfrey,lag(1)

$\ensuremath{\mathsf{Breusch}}\xspace{-}\ensuremath{\mathsf{God}}\xspace{-}\ensuremath{\mathsf{For}}\xspace{-}\ensuremath{\mathsf{God}}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xspace{-}\xsp$

lags(p)	chi2	df	Prob > chi2
1	1.743	1	0.1868

HO: no serial correlation

Since the P-value is less than 0.05 and we shall fail to reject the Ho and conclude that there is no presence of serial correlation in the data set.

4.3.4 Heteroscedasticity test

Heteroscedasticity occurs when the variance of the error term is different or not constant across the observation or independent variables. The Breush- pagan test was used to test for Heteroskedastic.

Ho: Homoscedasticity (error term is constant across all observations)

Ha: Heteroscedasticity (error term is not constant across all observations)

. estat hettest

```
{\tt Breusch-Pagan}\ /\ {\tt Cook-Weisberg}\ {\tt test}\ {\tt for}\ {\tt heteroskedasticity}
```

Ho: Constant variance Variables: fitted values of Exports

chi2(1) = 3.32 Prob > chi2 = 0.0686

The results in table indicate that the error term is constant across all observations (homoscedasticity); therefore, we don't reject Ho since P-value is in excess of 0.05

4.3.5 Non-Normally distributed residuals Test

To test for non-normally distributed residuals, the skewness/ Kurtosis test for normality was carried out since the sample size is still small and the results are indicated in table below.

	Sk	ewness/Kurtosis	tests for Norm	nality	
Variable	Obs	Pr(Skewness)	Pr(Kurtosis)	adj chi2(2)	joint Prob>chi2
myresiduals	29	0.6236	0.8437	0.28	0.8695

The results in table indicate that using the normally test report of chi-square statistic from the normality test does not reject the Ho. And we conclude that the residuals are normally distributed.

4.3.5 Perfect Multicollinearity

The variable inflation factor is use to test for the presence of perfect Multicollinearity between independent variables and the results are presented in table below.

. vif

Variable	VIF	1/VIF
FDIofGDP	1.00	1.000000
Mean VIF	1.00	

Results from the table above reveal that there is no presence of perfect Multicollinearity since the mean VIF is less than 5.

4.3.6 Lag-length selection criteria for cointegration

In analyzing time series data, we are posed with the question of how past events influences the current situation. The Bayesian information criterion and the Akaike information criterion were used in regularization of our model. The optimal lag length for testing cointegration was determined as indicated in table below.

. varsoc Exports_d1 FDIofGDP_d1 GDPpercapita_d1 BoP_d1 Inflation_d1 Interestrate_d1

ction-order	criteria						
le: 1999 -	2018				Number of	obs	= 20
LL	LR	df	р	FPE	AIC	HQIC	SBIC
-1073.83				3.2e+39	107.983	108.041	108.282
-1033.26	81.136	36	0.000	2.4e+39	107.526	107.934	109.617
-932.488	201.55	36	0.000	1.4e+37	101.049	101.807	104.932
1158.62	4182.2	36	0.000	6.8e-49*	-104.462	-103.354	-98.7862
2957.18	3597.1*	36	0.000	•	-283.718*	-282.551*	-277.743*
	LL -1073.83 -1033.26 -932.488 1158.62 2957.18	ction-order criteria le: 1999 - 2018 LL LR -1073.83 -1033.26 81.136 -932.488 201.55 1158.62 4182.2 2957.18 3597.1*	ction-order criteria le: 1999 - 2018 LL LR df -1073.83 -1033.26 81.136 36 -932.488 201.55 36 1158.62 4182.2 36 2957.18 3597.1* 36	ction-order criteria le: 1999 - 2018 LL LR df p -1073.83 -1033.26 81.136 36 0.000 -932.488 201.55 36 0.000 1158.62 4182.2 36 0.000 2957.18 3597.1* 36 0.000	ction-order criteria le: 1999 - 2018 LL LR df p FPE -1073.83 3.2e+39 -1033.26 81.136 36 0.000 2.4e+39 -932.488 201.55 36 0.000 1.4e+37 1158.62 4182.2 36 0.000 6.8e-49* 2957.18 3597.1* 36 0.000 .	LL LR df p FPE AIC -1073.83 3.2e+39 107.983 -1033.26 81.136 36 0.000 2.4e+39 107.526 -932.488 201.55 36 0.000 1.4e+37 101.049 1158.62 4182.2 36 0.000 6.8e-49* -104.462 2957.18 3597.1* 36 0.000 . -283.718*	LL LR df p FPE AIC HQIC -1073.83 3.2e+39 107.983 108.041 -1033.26 81.136 36 0.000 2.4e+39 107.526 107.934 -932.488 201.55 36 0.000 1.4e+37 101.049 101.807 1158.62 4182.2 36 0.000 6.8e-49* -104.462 -103.354 2957.18 3597.1* 36 0.000 . -283.718* -282.551*

```
Endogenous: Exports_d1 FDIofGDP_d1 GDPpercapita_d1 BoP_d1 Inflation_d1
Interestrate_d1
Exogenous: cons
```

The results in table above indicate that the optimal lag length is four (4) since four of the five criteria recommend that we consider lag length 4.

4.3.7 Cointegration test in the empirical model

Since the series are integrated of order I (1) that is stationary after first differencing the next step is to test Johansen test to establish weather a long run relationship exists between or among variables.

		Johans	en tests for	cointegrati	on		
Trend: c	onstant	Number	of obs =	27			
Sample:	1992 - 2	2018				Lags =	2
					5%		
maximum				trace	critical		
rank	parms	LL	eigenvalue	statistic	value		
0	20	34.82687		95.2188	47.21		
1	27	54.386573	0.76516	56.0994	29.68		
2	32	68.342223	0.64433	28.1881	15.41		
3	35	77.876849	0.50652	9.1188	3.76		
4	36	82.436259	0.28662				

The trace statistic indicates a maximum rank of three, suggesting that the null hypothesis of no cointegration is rejected. This result implies that there are cointegrating relationships in the empirical model. In other words, the cointegration test results suggest that FDI and its determinants trend together over time, and therefore there are long run equilibrium relationships in the empirical model.

4.3.8 Causality Test

The causality test issued to determine the direction of causality of the variables under study. The granger causality test was used and the results are presented in table below.

Granger causality Wald tests

Equation	Excluded	chi2	df	Prob > chi2
Interestratelog	Inflationlog	4.267	2	0.118
Interestratelog	BalanceofPayment		0	
Interestratelog	GDPpercapitalog	15.095	2	0.001
Interestratelog	FDIofGDPlog	.09961	2	0.951
Interestratelog	Exportslog	17.065	2	0.000
Interestratelog	ALL	56.559	8	0.000
Inflationlog	Interestratelog	3.6914	2	0.158
Inflationlog	BalanceofPayment	17.353	2	0.000
Inflationlog	GDPpercapitalog	10.273	2	0.006
Inflationlog	FDIofGDPlog	6.2378	2	0.044
Inflationlog	Exportslog	11.349	2	0.003
Inflationlog	ALL	25.041	9	0.003
BalanceofPayment	Interestratelog	5.2041	2	0.074
BalanceofPayment	Inflationlog	1.3742	2	0.503
BalanceofPayment	GDPpercapitalog	2.121	2	0.346
BalanceofPayment	FDIofGDPlog	.85478	2	0.652
BalanceofPayment	Exportslog	6.2454	2	0.044
BalanceofPayment	ALL	26.069	10	0.004
GDPpercapitalog	Interestratelog	28.604	2	0.000
GDPpercapitalog	Inflationlog	13.276	2	0.001
GDPpercapitalog	BalanceofPayment		0	
GDPpercapitalog	FDIofGDPlog	7.4249	2	0.024
GDPpercapitalog	Exportslog	29.764	2	0.000
GDPpercapitalog	ALL	94.627	8	0.000
FDIofGDPlog	Interestratelog	5.491	2	0.064
FDIofGDPlog	Inflationlog	1.3413	2	0.511
FDIofGDPlog	BalanceofPayment		0	
FDIofGDPlog	GDPpercapitalog	14.312	2	0.001
FDIofGDPlog	Exportslog	12.165	2	0.002
FDIofGDPlog	ALL	38.313	8	0.000
Exportslog	Interestratelog	49.882	2	0.000
Exportslog	Inflationlog	2.1853	2	0.335
Exportslog	BalanceofPayment		0	
Exportslog	GDPpercapitalog	37.002	2	0.000
Exportslog	FDIofGDPlog	3.8539	2	0.146
Exportslog	ALL	119.55	8	0.000

The results in table above indicate that all the independent variables Granger cause the dependent variable, FDI inflows in the model implying that the lags of FDI are supposed to be added in the empirical model since the reported p-value is less than 0.05 and there is need for inclusion of lags on other variables in the empirical model since the reported p>0.05 in all the variables run.

4.3.8 Error Correction Model

Estimation of the Long Run Foreign Direct Investment Inflows Model;

The results of the Johansen Multivariate Cointegration test indicate the presence of a long run cointegrating relationship between the variables. The ARDL Model was estimated as below;

Identification: beta is exactly identified

beta	Coef.	Std. Err.	Z	₽> z	[95% Conf	. Interval]
_cel						
FDIofGDP	1					
BalanceofPayment	2.14e-09	1.42e-09	1.50	0.133	-6.50e-10	4.93e-09
Exportslog	-17.1554	4.399518	-3.90	0.000	-25.77829	-8.532498
Interestratelog	16.8354	5.467136	3.08	0.002	6.120009	27.55079
Inflation	3101878	.0876843	-3.54	0.000	4820458	1383297
GDPpercapitalog	31.39706	7.623511	4.12	0.000	16.45525	46.33887
_trend	.4557575					
_cons	118.0562					

Johansen normalization restriction imposed

In the long run, BoP, interest rate and GDP percapita have a positive impact on FDI and aside from BoP, interest rate and GDP percapita are significant at 5%. Exports and Inflation have a negative significant impact on FDI inflows. This implies that exports, Inflation, Interest rate and GDP percapita have a symmetric effect on the FDI in the long run on average ceteris peribus. The cointegrating equation and long run model is as below;

FDI_t=118.0562-17.15Exports_t+16.8354INT_t-0.3101INF_t+31.39706GDP_t+ECT_t

SECTION FOUR PRESENTATION AND INTERPRETATION OF FINDINGS

4.0 Introduction

This chapter presents the results of the various analyses performed and their interpretations therein. Specifically, results from descriptive on inferential analyses are presented. The findings on the various objectives are explained below:

Determinates of Foreign Direct Investment

Results from the study revealed that, there is a significant moderate positive relationship between FDI and exports GDP percapita. There is a significant negative moderate relationship between FDI and Inflation rates, and Lending rates. There is however a weak insignificant positive relationship between FDI and BOP. See the figure below.

			GDP per	Balance of	Inflation	Lending
FD	I % of GDP	Exports	capita	Payment	rates	rate
FDI % of GDP	1					
Exports	.504**	1				
GDP per capita	.514**	.980***	1			
Balance of	522**	935***	958**	1		
Payment						
Inflation rates	.226	.146	.153	224	1	
Lending rate	666***	216	248	.201	.045	1

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

This implies that exports, GDP percapita, Inflation and Lending rates are significant determinates of FDI inflows in Uganda. This relationship is also proven to exist in both the short run and in the long run. BoP was proven to be an insignificant determinate of FDI, implying that it cannot statistically be proved that BOP determine FDI inflows in Uganda. This was therefore rejected in the model.

Performance of Foreign Direct Investment Inflows

The time series plot of the FDI over the period 1990-2018 is presented in the Figure 1 below.

Figure 1: Trend in Foreign Direct Investment Inflows (FDI) over the period 1990-2018



The study revealed that FDI inflows have been recorded at an average of 3.18% and variance of 1.668% between 1990 and 2018. The highest FDI inflows were noted at 6.5% and lowest was at a deficit of 0.13% in 2006 and 1990 respectively.

Although the trend of FDI inflows is positive, the series were recorded to be non-stationary implying that the FDI inflows are oscillating within a maximum of 6.5% and a minimum of 0%.

Contribution of Determinates to FDI inflows

Model 2: Variables : Adding	in Model: Expo : Infl	orts GDPper ation Inte	capita restrate			
Source	SS	df	MS	Numb	er of obs	= 29
				- F(4,	24)	= 10.70
Model	49.9083923	4	12.4770981	Prob	> F	= 0.0000
Residual	27.990047	24	1.16625196	R-sq	uared	= 0.6407
				Adj	R-squared	= 0.5808
Total	77.8984394	28	2.78208712	Root	MSE	= 1.0799
FDIofGDP	Coef.	Std. Err.	t	₽> t	[95% Conf	. Interval]
					-	•
Exports	5.30e-10	5.50e-10	0.96	0.345	-6.05e-10	1.66e-09
GDPpercapita	0018082	.0053793	-0.34	0.740	0129105	.0092941
Inflation	.0737186	.0397985	1.85	0.076	0084214	.1558586
Interestrate	315067	.0808216	-3.90	0.001	4818745	1482595
_cons	9.308095	1.994771	4.67	0.000	5.191091	13.4251

Through a hierarchical regression, the study revealed that the determinates of the FDI combined explain 64 percent of the variations in Foreign Direct Investment inflows.

4.1Descriptive statistics in all variables

Table 4.1 indicates the descriptive statistics for the variables under study focusing on mean, standard deviations, skewness and Kurtosis of these variables.

	N	Mean	Std. Deviation	Skewness		Kurtosis	
					Std.		Std.
	Statistic	Statistic	Statistic	Statistic	Error	Statistic	Error
Export	20	2126043717 0033	1877536888 32144	587	.434	-1.430	.845
Performance	29	2120043717.0955	1877550888.52144	.307			
FDI net							
inflows % of	29	3.9308	1.34822	-1.362	.434	4.383	.845
GDP							
Percapita	29	403.8164	194.00965	.465	.434	-1.454	.845
GDP							
Balance of	20	-	925752043.91966	633	.434	-1.268	.845
Payment	29	1371368785.7264					
Inflation rate	29	8.0952	2.93945	.337	.434	3.505	.845
Lending	20	22.8894	5.32215	2.375	.434	4.948	.845
rates	29						
Valid N	20						
(listwise)	29						

Descriptive Statistics

The results in table 4.1 indicate that; Uganda received an average of 3.9% FDI inflows between 1990 to 2018, lowest rate at -0.047% and the highest at 6.479%, furthermore, the data was concentrated around the mean by 1.34 (SD=1.34)

The results indicate that on average, exports were recorded at USD 2.1 billion between 1990 and 2018. The standard deviation recorded at USD 1.8 billion. GDP Percapita recorded at USD 403

with a standard deviation of USD 194. Inflation was recorded at an average of 8% with a concentration of 2.9%, Interest rates are averaged at 22% with a concentration of 5% and Balance of payment recorded at a deficit of USD 1.3 billion with a concentration of USD 926 million.

4.2 Trends of Variables

Foreign Direct Investment Inflows:

The time series plot of the FDI over the period 1990-2018 is presented in the Figure 1 below.





The results in figure 1 indicate that the FDI inflows have been oscillating at an average of 3.18% and a standard deviation of 1.67% with 1990 recording the lowest FDI inflows of -1.3% and 2006 highest at 6.47%.

Inflation rate:

The time series plot of the Inflation (INF) over the period 1990-2018 is presented in the Figure 2below.



The results in figure 2 indicate that the Inflation (INF) have been oscillating at an average of 6.49% and a standard deviation of 3.8% with 2002 recording the lowest annual average inflation rates of -0.287% and 2011 highest at 16.64%.

Interest rate:

The time series plot of the Interest rates (INT) over the period 1990-2018 is presented in the Figure 3 below.



The results in figure 3 indicate that the Interest rates (INT) have been averaged at 12% with a record lowest of -9.74% in 2009 and highest of 22.99% in 2002. The average mean varies with the interest rates at 7.19%.

Exports:



The time series plot of the Export over the period 1990-2018 is presented in the Figure 4 below.

The results in figure 4 indicate that the export trend is positive and upward moving with a minimum of USD 227million in 1993 and a maximum of USD 5.3 billion in 2018.

Gross Domestic Product Percapita

The time series plot of the Gross Domestic Product Percapita over the period 1990-2018 is presented in the Figure 4 below.



The figure above indicates that the GDP Percapita trend is positive and upward moving, with the maximum coming in the 2014 and the lowest recorded in 1993.

Balance of Payment (BoP)

The time series plot of the Balance of Payment over the period 1990-2018 is presented in the Figure below.



The figure above reveals that the balance of payment of Uganda has been recorded at deficit levels since 1990. The best performance happened in 1995 when the position nearly crossed to zero and the worst came in 2014.

			GDP per	Balance of	Inflation	Lending
FDI % of GDP		Exports	capita	Payment	rates	rate
FDI % of GDP	1					
Exports	.504**	1				
GDP per capita	.514**	.980 ^{**}	1			
Balance of	522**	935***	958**	1		
Payment						
Inflation rates	.226	.146	.153	224	1	
Lending rate	666**	216	248	.201	.045	1

4.3.9 Relationships between variables

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

According to the results above, there is a significant moderate positive association between FDI and exports, and GDP percapita. There is a significant negative moderate relationship between

FDI and BoP, and Lending rates. There is a weak insignificant positive relationship between FDI and inflation rates.

GDP per capita and Exports are strongly positively associated, BoP is strongly negatively related with exports, Inflation rate has a weak insignificant positive relationship with exports. A negative insignificant weak relationship exists between exports and lending rates.

The very strong negative correlation exists between GDP Percapita and BoP. Inflation and GDP per capita relate together in a weak insignificant positive way. There is a weak negative correlation between lending rates and GDP Percapita.

Inflation rates and BoP have a negative weak correlation. Lending rates and BoP have a weak insignificant positive correlation and there is a very weak correlation between lending rates and inflation.

SECTION FIVE DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.0 Introduction

This chapter discusses and concludes the findings of the study, recommendations and areas for further research. The study investigated the determinants of FDI in Uganda.

5.2 Determinates of FDI inflows Inflation

In the short run, investors increase their investments in order to benefit from the increasing prices of goods and services. In the long run, however, Investors experience high costs of production and low levels of demand from the consumers. Eventually, investors then shift their investments from Uganda to other countries.

Interest Rate

In the long run, investment flows from countries with low interest rates to countries with high interest rates. Uganda's situation is not different, with high interest rates being associated with more FDI inflows o the economy. Uganda therefore needs to ensure that her risk profile is well managed to attract a good interest rating that will lead to more FDI inflows.

GDP percapita

When the population incomes increase, people purchasing power is also increased leading to more demand of goods and services that the investors produce for local markets. FDI is also attracted to countries with high levels of purchasing power than countries with low purchasing power. Uganda's case is such that, investors that target local markets are influenced by the GDP percapita of the population.

Exports

In the long run, exports are negatively related with FDI inflows, implying that investors are impacted negatively when exports of Uganda fall in volume. This is because their business performance is equally affected by this negative performance. Exports are then a determinate of FDI inflows.

5.3 Performance of FDI inflows

The performance of FDI inflows in Uganda registers an upward slope with an average FDI inflows rate of 3.18% annually. This however is oscillating with 1.67% with the historical highest of 6.5% in 2018 and lowest in 1990. Government policies of reducing corporate tax for investors, ensuring a stable macro economy, establishing industry parks and export processing zones have yielded more FDI inflows over the time; however, they have failed to sustain the good growth trajectory with more oscillations than direct increase in FDI inflows to the economy.

Investments that target domestic markets and export promotion-oriented ones are realized as the main FDIs that are driving this performance. External shocks such as corruption, protective national laws and political instability especially during the election years are seen to contribute to this development.

5.4 Contribution of determinates to FDI inflows

The combine effect of interest rate, GDP percapita, BoP, Inflation and exchange rate on the inflows of FDI is 64%. This implies that these variables combined predict 64% of the variations in the FDI inflows. Therefore, in the efforts to attract more FDI, there is need to design interventions centered on these determinates to attract FDI inflows in to the country.

5.5 Conclusion

Based on the findings of the study, the following lessons have been learnt;

- i. The responsiveness of FDI to (exports, Interest and GDP percaipta) is positive and elastic. The implication is that an increase in the in the exports, Interest and GDP percaipta leads to a more than proportionate increase in FDI inflows in Uganda.
- ii. In the short run, exports, interest and GDP have a positive impact on FDI inflows in Uganda; however, Inflation has a negative relationship with FDI inflows.
- iii. The BOP is statistically insignificantly related to FDI inflows in Uganda. This means that the relationship exists but it's spurious. Exports, Interest, GDP percapita and Inflation combined determine 36% of the performance of the FDI inflows in Uganda.

5.6 Recommendations

In line with the study observation and findings the following are recommended;

- I. Uganda needs to devise mechanisms aimed at improving percapita income of the population. This has been proved that investors in Uganda target a lot of domestic market than exports and hence the need for policies that reduce poverty, unemployment among the population.
- II. Inflation should be kept in single digit and at around 6.4% as it has been proved to attract more investors in Uganda. Although in short run higher prices are desirable by investors, however in the long run they turn out to discourage investment. Monetary policy should target inflation at this level.
- III. To attract more FDI inflows, the Government needs not to target balance of payment since it has been proven that the relationship is not significant. More measure however should go towards import substitution and provision of incentives for investors that target export market to attract more export oriented FDI into the economy.
- IV. Inflation, exports, exchange rate, BoP and interest rates should be looked at the main determinates of the FDI in Uganda and policy analysis should centre itself on these indicators as they have been proven to have a combined effect on FDI variations.

5.7 Limitations to the study

While conducting the research, the researcher encountered some limitations. These include;

- i. Difficulty in accessing some data from Bank of Uganda for example on inflation required to get permission from school and also from the Bank which was tiresome.
- ii. The study data are time series data, limiting causal inferences to be made. Also, in studies that are time series in nature it is very difficult to get individual options.

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