IMPACT OF INTERNATIONAL TRADE ON THE ECONOMIC GROWTH OF UGANDA STUDY OF UGANDA 2000 – 2019

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A DISSERTATION SUBMITTED TO THE SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF A DEGREE OF BACHELOR OF SCIENCE IN ECONOMICS AND STATISTICS OF UGANDA CHRISTIAN UNIVERSITY

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UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

Research report submitted by JUSTUS ANATORY KASHASIRA to the school of business in Partial Fulfilment of the Requirement for the Award of the Bachelor of Science in Economics and Statistics of Uganda Christian University. This report is my original work and has not been presented for degree award in any other university.

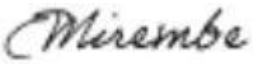
Signed: .....

Date: 05/09/2024.....

APPROVAL

This research report has been submitted for examination with my approval as a University Supervisor.

Mrs. ELSIE MIREMBE NSIYONA

Sign: 

Date: 05/09/2024

DEDICATION

This report is dedicated to my dear father Mr. Anatory Kashasira and my dear mother Mrs. Goodluck T. John for their encouragement and effort towards my academic journey and accomplishment of this research report. Secondary, Special thanks goes to my beloved brother Alistides A. kashasira who worked hard to provide all financial support and guidance to my entire academic journey and toward accomplishment of my research work. Lastly My thanks goes to my sisters Yasinta and Fravia and my brothers Grodiani, Erick, Antidius, Sweetbert and each one of you especially my friends. My almighty grant wisdom and reward them abundantly.

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LIST OF ACRONYMS AND ABBREVIATIONS

ADB	African Development Bank
APA	American Psychological Association
BUBU	Buy Uganda Build Uganda
BOP	Balance of Payment
BoU	Bank of Uganda
D^{st}	First Differencing
DD^{nd}	Second Differencing
EAC	East Africa Community
ELG	Export Led Growth
DFI	Direct Foreign Investment
GDP	Gross Domestic Product
ILG	Import Led Growth
GNP	Gross National Product
IMP	Imports
Ms Excel	Microsoft Excel
Ms Word	Microsoft Word
PPP	Purchasing Power Parity
OLS	Ordinary Least Squares
STATA	Statistics and Data
UBOS	Uganda Bureau of Statistics
UIA	Uganda Investment Authority
USD	United States Dollars
WB	World Bank
WISC	University of Wisconsin – Madison
WTO	World Trade Organisatio

ABSTRACT

Basing on Uganda's economy, International trade acts a key drive of the economic growth. This study empirically investigated the impact of international trade to the economic growth of Uganda for period 2000 to 2019 using quantitative research methodology. The main reason of this study was to find out how export, import and direct foreign investment impact the Uganda's GDP.

To achieve this objectives a linear multiple regression model was developed using Ordinary least square technique and was appropriately analysed and interpreted. The results obtained using STATA software showed that import had a positive and significant effect on economic growth of Uganda and export had a moderate effect to the economic growth of Uganda together with foreign direct investment.

Recommendation basing on this study, policy makers and other government authorities should continue putting much effort in areas that can boost export such as tax holiday to local investors of Uganda and attract foreign investment.

CHAPTER ONE

INTRODUCTION

This chapter provides an overview of the research topic by outlining the problem statement, which served as the foundation for the objectives and the easy way to formulate research questions. In addition, the research topic's relevance is given.

1.1 Background of Study.

The growth of the country's economy was significantly influenced by international trade. Which is the exchange of goods and services between countries. The relationship between international trade and economic growth has been studied by researchers ever since the classic age of the 18th century, when David Ricardo and Adam Smith believed that trade may have a positive impact on economic progress**.** Trade internationally, which mean the exchange involving goods and service conducted between two or more different countries, played a significant role in the development of the nation's economy, since that time researchers have been examining the relationship between international trade and economic growth (Frieden & Rogowski, 1996) and (Baines, 2003).

Certain economies have benefited economically from international trade, such as China and India. Developing countries have benefited greatly from the past ten years, as their economies have grown at previously unheard-of rates. China and India together with a few other small Asian, African, and Latin American countries put on the most of this amazing show. China and India are the two countries growing at the fastest rates in terms of GDP. In the long run, both nations have profited from opening up to foreign trade, even though they had distinct economic booms in terms of duration, intensity, and development processes, despite sharing many traits (Prasad, 2004).

Geographically, China and India shares a common border and are located on the same continent. Their population exceed one billion, making them "giants" in terms of demographics. Both countries have a rich and lengthy history, and their economic development is comparable. Despite notable differences. The two nations' various political systems are likely the primary distinction (with democracy being well rooted in India). International commerce has significantly boosted the economies of China and India since the start of economic reforms and the adoption of the open-door policy, starting

in 1978 for China and 1980 for India. Additionally, the increase in home productivity that has resulted from their involvement in foreign trade. Because of this, their economic development can be used as a standout example to show how any determined country can rise up the economic success ladder and therefore increase their participation on the world arena.

Before 1978, China experienced a number of developmental phases, including times when it was totally isolated and dependent on the Soviet Union, both of which had little effect on its trade with the rest of the world. Rather, to offset its imports, China exported primarily excess raw materials and simple manufactured goods. China had a planned economy at the time, and its import substitution policy sought to maximize its export structure by encouraging the growth of indigenous industries. Several national industries were established as a result of this policy to support economic growth, but because there was no import competition, it was impossible to optimize resource allocation, efficiency, or technological advancement.

Basing on this a lot has also been written on the reasons why Africa performs poorly in terms of global commerce and economic growth, but without offering any reasonable answer to this economic problem. However, new studies on the flow of international trade in Africa have shown a significant transformation in the continent and identified promising signs of progress for example South Africa being one of the African country have really benefited from the international trade, as a country is member of 26 trading blocs have signed 7 agreement (WITS 2017) in which a country has 223 export partners and 232 import partners which has pushed it to be third-largest economy in Africa according to (MIF). These developments have led to the emergence of numerous agendas on the continent that emphasize fostering free trade among African countries in order to advance economic integration and development.

In East Africa region countries like Kenya, Rwanda and Tanzania have a positive progressive impact on international trade for example Kenya since there independence in 1963 has been a considerable progress in the International trade where between the year 2013 and 2014, Kenya registered highest Direct foreign investment of 97.8billion, 95 percent increase from 49.9billion in 2013, in Rwanda the According to World Bank data, exports accounted for 5.4percent of GDP in 2000 and increased to 20.8percent by 2019 (World Bank 2018). In contrast, imports of goods and services accounted for 21.1percent of GDP in 2000 and 34.68percent by 2018 (World Bank 2019). The East African Community (EAC) Secretariat has emphasized the need for coordinated International trade to boost economic growth of the member states and enhance trade stability within the region (EAC Secretariat, 2018).

In Uganda the effort to transform its economy can be traced to 1900s where the British Government provided grants that were used to transform the country agricultural society. Then in 1962 the Uganda Government became officially responsible with economic transformation like increase export, import and good government system to attract Direct foreign Investment, different policies where introduced which resulted into the signing of different agreement like Uganda – India trade Agreement which allowed foreign investors in Uganda that led to the increase $62.02 to $133.40 of GDP in 1970 despite increasing Import, Export and DFI and economic growth since early 19080s, there have been few studies on impact of Export, Import and Direct foreign Investment on the economic growth of Uganda, most studies are focusing on the contribution of export, Import and direct foreign Investment. It is against this backdrop that the current study seeks to examine the Impact of international trade on the economic growth of Uganda, using Secondary Data from the World Bank database (World Development Indicators).

1.2 Problem Statement

Uganda's economic growth it has been a difficult topic, mainly because, like other developing nations, Uganda seeks to raise the GDP level in its economy by determining the most effective ways to boost productivity. Even though Uganda is a country blessed with a significant raw material deposit and a very fertile area combined with favorable weather for agriculture, Unfortunately, Uganda is at the wrong end of an uneven trade environment that favors countries that are already industrialized since it nearly entirely depends on the exports of mostly primary products, which are characterized by lower pricing.

The majority of Uganda's imports, including some finished goods like fruit juice and clothing, do not increase the GDP of the nation. Uganda's economy is categorized as being reliant on imports. There are also arguments that the importation of low-quality, inexpensive domestic goods deters consumers from buying local products, which reduces their GDP contribution Sarah Ssewanyana &John Mary (2009).

Consequently, despite the fact that trade flows have a number of advantages, they have not entirely benefited Uganda's economic growth. As a result, these advantages cannot be directly translated into economic growth because of various macroeconomic policy distortions brought on by global trade, which appear to be transforming the nation's economy into one that is import dependent given the increase in imports from US$27 million in 2014 to US$28 million in 2015. The World Bank's development indicators show that Uganda's highest import level was US$33 million in 2011 (World Bank, 2016). In turn, this as

led to a persistent rise in the nation's negative trade balance. According to UBOS' data overview, the nation's trade deficits persisted from 2011 to 2015, with the largest deficit of US$3,462.8 million occurring in 2014. (UBOS, 2016).

Uganda, like many other developing nations, has used trade-led economic growth strategies to achieve economic growth and poverty reduction as well, in light of the argument that international trade (FDI, exports, and imports promotion) leads to economic growth. However, the empirical validity of the export and import-led growth strategy has been called into question by numerous researches undertaken in numerous nations regarding the relationship between trade and economic growth. This is the motivation behind conducting this research, which aims to close the empirical knowledge gap by testing the theory of export- and import- led growth specifically for Uganda, as opposed to other sub- saharan African countries. Specifically, the research will look at how Uganda's growth rate is affected by its exports, imports and direct investment.

Purpose: The purpose of this study is to examine the impact of exports, imports and foreign direct investment (FDI) on the economic growth of Uganda.

1.3 Research Objective

- **i.** To establish the relationship between Exports growth and GDP growth of Uganda (2000 to 2019)
- **ii.** To establish the relationship between Imports growth and GDP growth of Uganda (2000 to 2019)
- **iii.** To establish the relationship between Foreign Direct Investment (FDI) growth and GDP growth of Uganda (2000 to 2019)

1.4 Research Hypothesis.

The null hypotheses of the research state the following:

- **i.** There is no relationship between Exports growth and GDP/Economic Growth of Uganda.
- **ii.** There is no relationship between Imports growth and GDP/Economic Growth of Uganda.
- **iii.** There is no relationship between Foreign Direct Investment and GDP/Economic Growth of Uganda.

1.5 Research Questions

- **i.** How does the relationship between Exports and GDP of Uganda affect Economic Growth?

ii. How does the relationship between Imports and GDP of Uganda affect Economic Growth?

iii. How does the relationship between Foreign Direct Investment and GDP of Uganda affect Economic Growth?

1.6 Scope of the Study

1.6.1 Content Scope

The study will be focused on the establishment of the relationship between imports and GDP of Uganda (2000 to 2019), the relationship between Exports and GDP of Uganda (2000-2019), the relationship between foreign direct investment and GDP of Uganda (2000 to 2019).

1.6.2 Geographical Scope

The study will be carried out in Uganda using secondary data. Uganda, a landlocked country in East Africa, shares borders with South Sudan to the north, Kenya to the east, Tanzania and Rwanda to the south, and the Democratic Republic of the Congo to the west.

1.6.3 Time Scope.

The study will be conducted for two month and it will be used to review the twenty-year time series data that is, from 2000 to 2019 in Uganda.

1.6.4 Theoretical Scope.

The study will be guided by the classical theories from the 18th century of David Ricardo and Adam Smith which emphasized that trade can influence positively economic growth.

1.7 Justification of the Study.

The empirical validity of the export and import-led growth strategy has been called into question by numerous researches undertaken in numerous nations regarding the relationship between trade and economic growth. This is research aims to contribute to closing the empirical knowledge gap by testing the hypothesis of export and import – led growth exclusively for Uganda, distinct from other sub-saharan African countries, by investigating the impact of Uganda's export rate on its growth rate, determining the impact of Uganda's import rate on its growth rate, and determining the impact of foreign direct investment on Uganda's growth rate.

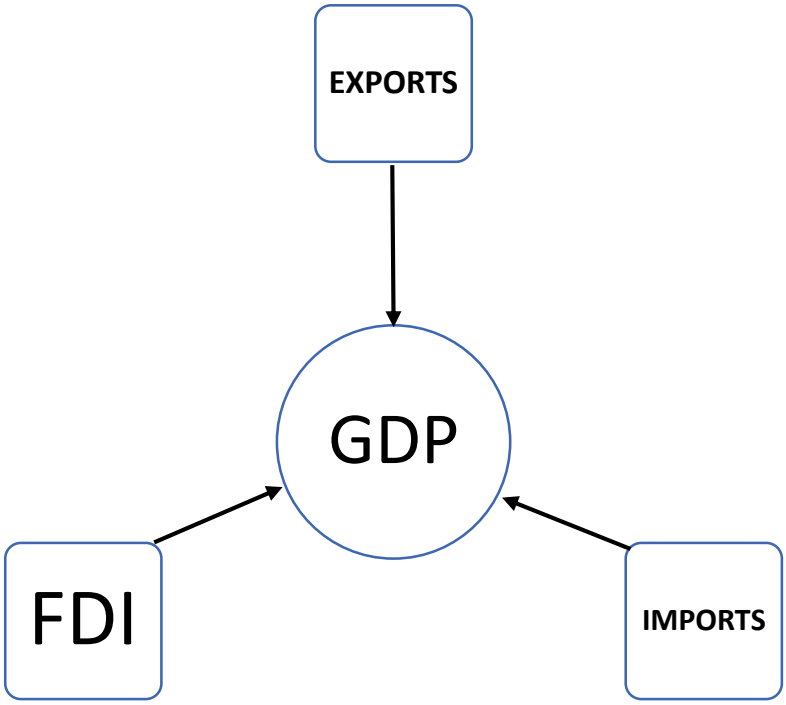
1.8 Significance of the Study.

This search for empirical evidence that quantifies the impact of international trade on Uganda's economic growth is important because the country's trade policy aims to support employment, economic growth, export diversification and promotion (particularly non-traditional exports), and vertical diversification is to be achieved through additional processing of primary export products (WTO, 2001). Therefore, the results of the study will be used by policymakers to decide whether Uganda should keep up its trade-led economic growth.

1.9 The Conceptual Framework.

The Gross Domestic Product (GDP), as previously mentioned in this paper, is the dependent variable, and exports, imports, and foreign direct investment (FDI) are the independent variables. Our goal in this study is to examine how dependent and independent variables relate to one another

Illustration of Conceptual Framework.



1.10 Theoretical Framework.

The reason of this section is to highlight the fundamental speculations that offer assistance to us to talk about the relationship between trade (trade, FDI and imports) and economic growth inside the system of this investigate. These speculations clarify the impacts of international trade on economic growth in angles of import-led development (ILG) and export-led development (ELG) policies.

Export-led Growth School: The terms "export-led growth," is used to define policies of countries that have been successful in developing their export markets.

Import-led Growth School: Most import expenditure reduces national income resources, which is the fundamental reason why economic growth and imports are regarded to be negatively correlated. Nonetheless, economists all agreed that the reason import have an impact on GDP is because they allow a nation to obtain productive elements that it is unable productive element that it is unable to produce on its on its own or within its borders because the necessary labour, technology, skills, and other resources are not readily available.

CHAPTER TWO

LITERATURE REVIEW

2.1.0 Introduction

The purpose of this chapter, in the context of this research, is to stabling important theories that help us talk in –depth about the connection between international trade "Export, import and Foreign direct Investment (FDI)" and economic growth. This chapter also summarizes previous empirical studies that were conducted to evaluate the conceptual and empirical effects of imports and exports on economic growth in relation to import-led growth (ILG) and export-led growth (ELG) policies.

There is a connection of sorts between global economy and economic growth. This relationship has been demonstrated in research on international trade and economic growth. Since a few years ago, there have been ongoing discussions regarding the impact of trade on economic growth. Understanding some theories is essential to analyzing the ways in which Uganda's economic growth has been influenced by international trade.

2.1.1 Theoretical literature Review

2.1.2 Import – led Growth School (ILG). It is believed that there is a negative correlation between imports and economic growth because the majority of import expenditures deplete national income resources. Notwithstanding, the majority of economic concurred that import affect GDP because they enable a nation to obtain useful commodities that it is unable to manufacture domestically owing to a lack of labor, technology, skills and other resources. Due to their ability to boost domestic production levels and to facilitate economic interactions between citizens of a country and their counterpart abroad, imports serve as the primary diffusion channel in this international trade of capital and technology. The conviction that the relationship is unhealthy Economic growth and imports are related because the majority of import expenditures reduce national income resources, imports serve as the primary diffusion channel in this international trade of capital and technology, Grossman & Helpman, (1991); Ram, (1990).

Authorities should be aware of the potential effects on employment even though it may still be advantageous to use imported materials to produce the high-quality goods needed to compete in export markets. Kenya, Uganda's neighbor, studied the effects on employment which discovered that businesses who import frequently hire more people than those who don't. This is not surprising, given that these companies' high productivity may have already made them better. Furthermore, it is anticipated that these companies will produce more, which will increase GDP. Whether or not these facts apply to Uganda, they are currently the most pertinent that can be found when attempting to link imports to economic growth. However, it's also crucial in this instance, to ensure that businesses have appropriate access to the supplies they need. Imports are used by all economic sectors, not just the export ones, which make up a lesser portion of Uganda's GDP. Therefore, policies targeted at expanding the import market or speeding up imports benefit a number of industries, including construction, manufacturing, transportation, hospitality, and tourism.

2.1.3 Foreign Direct Investment

The foreign capital flows are a major factor in Uganda's economic growth, For example FDI contribute USD 1.75billion in the FY 2018/2019 According to U.S DEPARTMENT OF STATE (2019) domestic investments is the main determinants of foreign direct investment (FDI) inflows, however, studies have shown that the effect on FDI inflows is negligible. According to different previous study, foreign direct investment (FDI) affects Uganda's economic growth in three different ways. First, there is a clear correlation between FDI and GDP growth. Through domestic investments and a multiplier process, the second channel indirectly contributes to higher rates of economic growth. The third channel is exports, which leads to growth that is fueled by exports.

2.1.4 Export – led growth school

"Export-led growth" describes the strategies used by countries that have been successful in growing their export markets. Export orientation is encouraged in a number of countries, especially LDCs, as it promotes specialization, which raises national output and lowers local prices. Exports help the economy make better use of its resources by producing goods and services that can be sold in excess to meet foreign demand. The nation produces more as a result, earning foreign exchange that can be used to finance economic growth (Krueger, 1985; Lal, 1992).

According to the export-led growth hypothesis, there are a number of theoretical explanations for why exports are the primary force behind economic expansion. First, because of the foreign exchange multiplier, increasing exports will, according to Keynesian theory, boost income growth in the near future. Second, increased foreign exchange from exports is used to purchase necessities that boost any nation's economy, such as food, fuel, machinery, electricity, and transportation supplies. Third, exports indirectly support growth through increased capacity utilization, economies of scale and scope, increased competitiveness, and technological advancement. Fourth, there are several positive externalities that come with higher exports, including better production processes, technical competency in product design, enhanced management or a decline in organizational inefficiencies, and positive learning from overseas competitors. The export For a number of theoretical reasons, the led growth hypothesis asserts that exports are the main driver of economic growth. First, Keynesian theory predicts that growing exports will accelerate income growth in the near future due to the foreign exchange multiplier. Second, through improved competitiveness, economies of scale and scope, technological advancement, and higher capacity utilization, exports indirectly support growth.

2.2. Empirical Literature review

2.2.1 Foreign Direct Investment

In many nations, increases in FDI (foreign direct investment) have sped up economic growth. The foreign direct investment (FDI) flows into Uganda and the neighboring countries like Kenya, Tanzania and Rwanda have exhibited a varied pattern, which is reflected in the impact of FDI on the growth rate of these economies. Economic growth and foreign direct investment (FDI) have been linked in numerous studies; however, the findings are not always consistent. The pattern of foreign direct investment (FDI) into the Uganda and its neighbors, Kenya, DRC Congo, Tanzania and Rwanda, as well as the relationship between FDI and GDP, are said to be high due to availability of cheap labor and the capital returns are high (Obstfeld, Rogoff 1996). The findings demonstrated that the various economic approaches of the participating nations helped to explain the variation in the quantum and that the GDP and foreign direct investment are related. Therefore FDI is essential to promoting the economic growth wof the countries under study in every situation, Sengupta & Puri, (2018).

2.2.2 Export – led Growth School (ELG)

In numerous nations, a wealth of empirical data has been examined using time series methods to investigate the relationship between exports and economic expansion. It's interesting that opinions about the direction of causality between the two series cannot agree, despite the evidence being presented. Moreover, scholars continue to disagree about the connection between exporting and economic growth. The export -led growth hypothesis (ELG) is based on evidence put forth by others and holds that international trade flows, or the export of goods from one nation to another. Some authors have backed the export-led growth (ELG) theory, which holds that export growth happens ahead of economic growth. Moreover, scholar B.N. Tripathy (2008) claimed that the main drivers of economic growth are exports. In his investigation of India's exports and economic expansion, he made use of Adam Smith's theories of export, which provided historical background for his work and allowed him to try to assess how the Indian economy contributes to international trade. The author claims that in the Indian economy, growth-led exports has always coexisted. Furthermore, Mr. B.N. Tripathy raised the point that in small nations with scarce natural resources, export specialization can hasten economic growth (Tripathy, 2008)

In addition, African Growth and Op-portunity Act (NGOA 2016's) empirical study looked at how exports affected Kenyan economic growth between 2003 and 2005. The growth of manufactured exports demonstrated a strong positive correlation with GDP growth where export contributed USD 36 in 2003 to USD 284 in 2005, while the rise of primary exports rarely had any effect on GDP growth. Higher levels of development and a shift in the composition of exports toward manufactured goods were the reasons they gave for this change in the relationship between GDP growth and export growth (Nidugala, 1990). They also supported increased technology transfer, tax and duty breaks for export promotion, and trade show marketing assistance (Thikraiat, & Shatha, 2014).

2.2.3 Import – led Growth (ILG)

After implementing market reforms, China's economy ranked eleventh in the world, accounting for just 2% of the global GDP. China's economy has grown to become the second largest in the world, accounting for 10% of the global GDP. Over the past few decades, it has grown at the fastest rate of any nation. This economic prosperity has been largely attributed to the flow of international trade. Since its

founding in 1978, China's economy has grown from being closed to becoming the world's largest exporter.

Notable changes in Chinese imports as a result of this sharp increase offer fascinating information that should be carefully examined in light of the country's economic expansion. It is a common assertion that the rest of the world is impacted by China's economic growth. China is becoming the world's largest exporter thanks to its expanding comparative advantage in a specific product. Chinese goods are now a rival to local products in their own regional markets (Munch, 2014).

CHAPTER THREE

THE METHODOLOGY

3. 1 Research Design

A statistical analysis was conducted on the time-series data obtained between 2000 and 2019 using a quantitative research methodology. The present study employed the framework to investigate the relationships between Uganda's exports and economic growth, imports and economic growth, and, finally, the relationships between foreign direct investment and economic growth in Uganda, with the aim of achieving the research objectives. Annual time series data covering twenty years, from 2000 to 2019, is anticipated to be analyzed for this study in order to incorporate the short- and long-term links between export, import, foreign direct investment, and economic growth into the model.

The data set contains observations of the GDP for foreign direct investment, import and export of goods and services expressed in current US billions of dollars. Every data set was gathered straight from the World Bank's development indicators.

The term "research design" refers to the comprehensive strategy developed to logically and persuasively integrate the various study components in order to successfully address the research problem. It functions as the cornerstone plan for collecting, calculating, and interpreting data. It is crucial to keep in mind that the study's design is determined by the research problem. As such, time-series data covering the years 2000–2019 was collected and statistically analyzed using a quantitative research approach

3.2 Area of Study

The study's focus was economic growth and development. Economic growth is the increase in the amount of goods and services that an economy produces. In the context of Uganda's growing economy, economic development is the process of reducing and eliminating inequality, unemployment, and poverty. Real national income growth is correlated with economic growth. Therefore study will shows how imports, exports and foreign direct Investment boosts a nation's GDP growth, which increases national revenue and has a major positive impact on Uganda's economic expansion.

3.3 Data and source

Methods for gathering secondary data was used in the study. Secondary data refers to information gathered by a part other than a researcher with no connection to the current study. The techniques for test evaluations, the indicators used to record program outcomes, and the kind of analysis to be carried out are all determined by the quantitative structure of the required data.

3.4 Sampling techniques

Data on Uganda's GDP, imports, exports, and foreign direct investment (FDI) over a 20-year period (2000-2019) is gathered from the Secondary source using the sample technique known as adaptive cluster sampling. Because imports and exports have a big impact on policy, picking the appropriate reference period is crucial. This is a time of strong, consistent growth that fell in line with the main shifts in our economy.

3.5 Research population

The study made a use of time series data covering 20 years, from 2000 to 2019, on Uganda's GDP, imports, exports, and foreign direct investment (FDI).

3.6 Econometric Model

To achieve the objectives of this work, a linear multiple regression model was created using the Ordinary Least Square (OLS) technique, and it was then appropriately analyzed and interpreted, so that the variance between the actual and expected observations—that is, the sum of squared errors—can be reduced.

<u>The mode is stated as follows</u>:-

Dependent variable (ΔGDP) = Change in Independent variables (Export + Import + DFI)

$\Delta GDP_t = \beta_0 + \beta_1 \Delta EXP_t + \beta_2 \Delta IMP_t + \beta_3 \Delta FDI_t + e_t$

Where

ΔGDP_t = **Change in Growth Domestic Product**

β_0 == Constant parameter

$_t$ = time period

$\beta_1 \Delta EXP_t$ = Change in Export "independent Variable"

$\beta_2 \Delta IMP_t$ = Change in Import "independent Variable"

$\beta_3 \Delta FDI_t$ = Change in Foreign direct Investment (independent Variable)

Δ = Change in variables

e_t = Residuals/ disturbance/ error term

β_1, β_2 and β_3 = Parameters to be estimated in the multiple regression model

3.7 Variable definition and Measurement levels

ΔGDP_t, Measures the change in total market value of finished goods and services produced within a country's border in a specific period of time, was used in this study. Tomaro and Smith (2009) assert that a consistent GDP growth rate over time promotes economic growth. As a result, it predicts economic growth roughly. GDP figures was also expressed in billions of US dollars at the current exchange rates.

The total amount invested by all foreign entities as the majority ownership in all Ugandan companies is known as foreign direct investment (FDI), ΔFDI_t is expressed in US dollars in billions, using the current exchange rate.

The total amount of goods and services that Uganda has imported is represented by imports (ΔIMP_t). In this study, imports was quantified in billions of US dollars basing on the current exchange rate regime. Exports (ΔEXP_t) are the total amount of goods and services produced in Uganda and exported to other countries like Kenya, Tanzania and China among others expressed in billions of US dollars and measuring them using current exchange rates.

3.8 Procedures of data collection

The World Bank development indicators online database was consulted in order to gather annual data on GDP, imports, exports, and foreign direct investment growth in Uganda for a twenty-year period, from 2000 to 2019. This data was entered into the Record spreadsheet.

3.9 Quality / error control

The efforts and protocols implemented to guarantee the precision and quality of data being gathered utilizing the approaches selected for this specific study was described in this section James Roe, (2022). Uganda's GDP, imports, exports, and foreign direct investment (FDI) data was obtained from the

reliable World Bank Development Indicators website. An information source that is consistent and trustworthy was produced through the application of globally recognized standards and conventions.

Furthermore, diagnostic testing was performed on the data that was utilized in the regression model. Regression diagnostics is one of the most crucial phases of the modeling process. Diagnostics for regression models are instruments that assess if the model meets its assumptions and if it accurately represents a single or a set of observations (WISC, 2022). As diagnostic tests, this study used autocorrelation, error normality, and heteroskedasticity. The section on diagnostic tests that follows provides an explanation of the specifics and intent behind the aforementioned tests

3.10 Data processing and analysis

To carry out an economic analysis, the econometric tests that allows to ascertain whether there was a relationship between exports, imports, foreign direct investment, and economic growth expressed as the gross domestic product in this study which was conducted using STATA and Microsoft Excel software. The various analysis tests to run for this study are listed below.

Multiple Regression Analysis: It is used to predict a variable's based on the values of two or more variables, multiple regression analysis, which is a simplified version of linear regression. This can also be characterized by an equation that shows the relationship between two or more variables. The regression equation depicts the line that was used to estimate Y based on X. The regression line is found using a mathematical method called the least squares principle, which removes judgment. The "best fitting" line is produced by this process Gujarati & Porter, (2009).

Descriptive Analysis: It covers data analysis techniques as well as the presentation of numerical facts and statistics in tables and graphs. For this investigation, a descriptive analysis of central tendency and variability was performed on the data. While the standard deviation, skewness, and kurtosis are measures of variability, the mean, median, and mode are measures of central tendency. Descriptive analysis is required to ascertain the normalcy of the distribution.

3.11 Ethical Considerations

The research designs and practices in this study was guided by a set of ethical considerations. Researchers must always follow a set of ethical guidelines when collecting data from diverse sources (Bhandari, 2021). The data for this study was sourced from the World Bank's database, and was freely used in this study. Reproduction, distribution, adaptation, display, and incorporation into other works are all permitted under the terms of a Creative Commons Attribution 4.0 International License (WORLD BANK, n.d.).

3.12 Methodological Constraints

A linear multiple regression model was created using the Ordinary Least Square (OLS) technique; however, by its very nature, linear regression only examines linear relationships between dependent and

independent variables. In other words, it makes the assumption that their relationship is linear (Flom, 2018). Most of the time, though, this is not accurate. As an illustration, the relationship between GDP and imports is curved; that is, imports typically increase during the first stages of GDP growth, level off during the later stages, and then decline following the highest GDP levels. Examining the graphical depictions of the Regression Scatter Plot relationships found in the Linear Regression Analysis section will reveal this issue.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter provides the presentation, analysis and interpretations of findings and the findings are presented mainly in descriptive statistic and results obtained using STATA software are discussed in details.

4.2 Descriptive statistics

The results of descriptive statistics are discussed in summary bellow

Table. 1 Summary of Descriptive Statistics

Variables	GDP	EXPORT	IMPORT	FDI
Mean	590.3517	2.05e+09	5.19e+09	6.85e+08
Std. Dev	263.0789	1.15e+09	2.79e+09	3.63e+08
Min	235.853	4.50e+08	1.41e+09	1.51e+08
Max	897.5097	4.10e+09	9.80e+09	1.30e+09
Variance	69210.52	1.32e+18	7.79e+18	1.32e+17
Skewness	-0.2709046	-0.060948	-0.1325529	-0.0679809
Kurtosis	1.243632	1.831893	1.583412	1.888125
Observations	20	20	20	20

Table 1 presents a descriptive overview on mean deviation, skewness and range of Uganda's GDP, import, export and foreign direct investments for a period of 20 years from 2000 to 2019. The results depicts that the average GDP is $590.3517 billion with a standard deviation of $263.0789 billion underlining the massive disparities in GDP level. For the years of study, GDP reveals a remarkable range from $235.853 billion to $897.5097 billion with a fair normally distributed of -0.2709046 tending toward the left.

Conversely, the export data reveals a mean value of $2.05 billion, accompanied by a moderate standard deviation of $1.15 billion, indicating a range of $4.50 million to $4.10 billion. Notably, the skewness coefficient of -0.060948 suggests a slight leftward tendency, while the kurtosis value of 1.831893, being less than 3, indicates a relatively normal distribution. This implies that the export data is approximately symmetrical, with a minimal deviation from the mean, thereby suggesting a stable export performance

over the observed period. Meanwhile the mean average of import value of 5.19billion, with a standard deviation of $2.79billion, its range starting from low to high of $1.41 million to $9.80billion. Notably, the skewness coefficient of -0.1325529 suggests a slight leftward tendency, the kurtosis value of 1.831893, being less than 3, indicates also a relatively normal distribution. This implies that the data is approximately symmetrical, with a minimal deviation from the mean, thereby suggesting a stable export and import performance over the observed period

4.3 Correlation Matrix

The statistical technique known as correlation analysis looks at the strength of a link between two continuous variables, like height and weight, that are measured numerically. This particular sort of analysis is useful when a researcher wants to find out if there might be links between variables. A correlation between two variables indicates that, over time, as one changes on a regular basis, the other variable likewise changes on a regular basis. If an association is found, it may or may not be positive or negative depending on the numerical values examined Correlation Analysis - Market Research, (2019). If two variables rise at the same time, there is a positive correlation, meaning that the high numerical values of one variable are related to the high numerical values of the other.

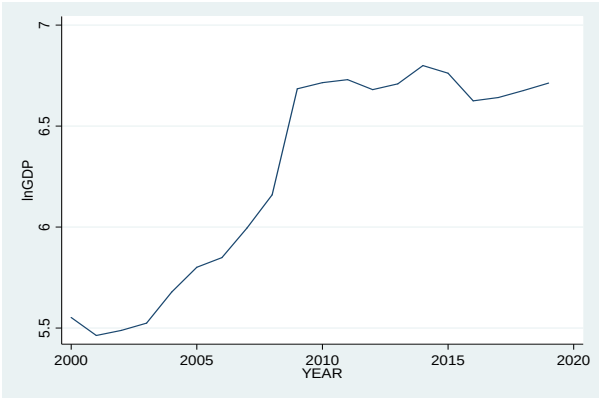
Table 2 Correlation Matrix

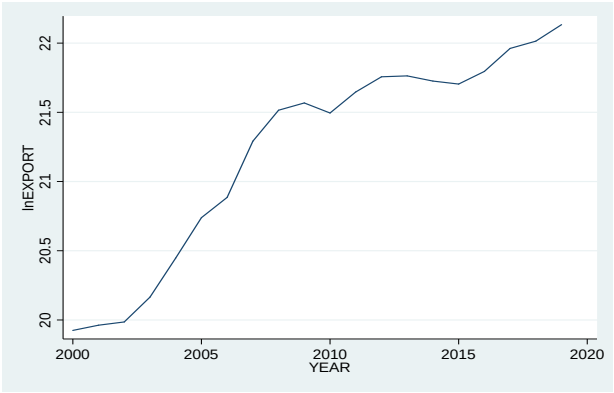
	lnEXPORT	lnIMPORT	lnDFI
lnEXPORT	1.0000		
lnIMPORT	0.9880	1.0000	
lnDFI	0.9538	0.9441	1.0000

From the table above, it is seen that all the variables are highly positively correlated. For instance GDP versus Export is 10percent, this indicates that the two variables are positively correlated, as years increase, GDP versus Import is 98.80percent meaning the two variable are highly correlated. Therefore, have a strong relationship

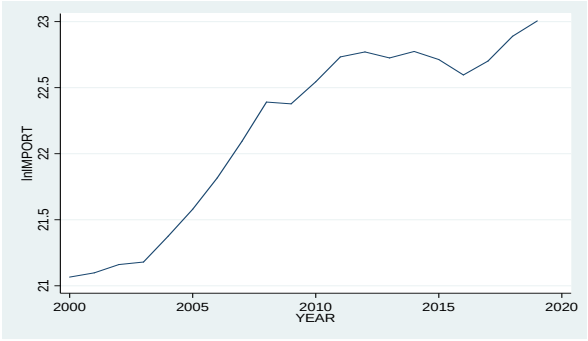
Table 3 Variables at level

lnGDP	LnEXPORT





LnIMPORT



lnDFI

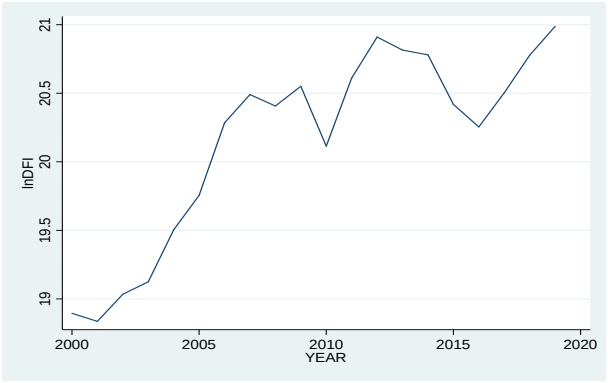
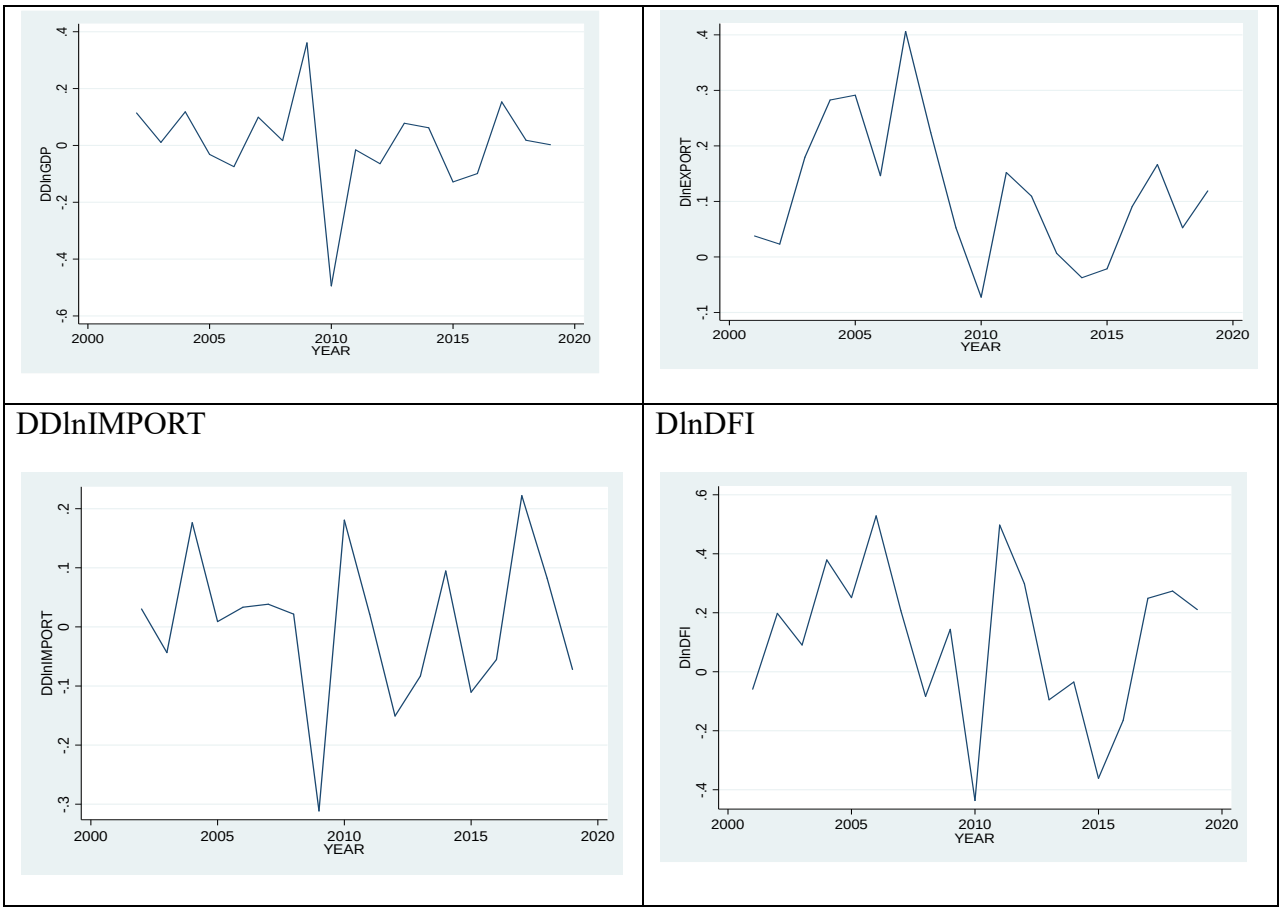


Table 3 above depicts a graphical representation of each variable at level, certainly, the graphical visual view indicates GDP, export, import and DFI are all non-stationary meaning their mean and variance evolve overtime. This further reveal that the variables under study are integrated series.

Table 4: Stationarity at Dst and DDnd Difference

DDlnGDP	DlnEXPORT



Presenting the stationary

Stationary being a key and important assumption in time series analysis, which ensures that statistical properties of data remain constant over time. Basing on the above results the data became stationary after differencing for the second time. After the second differencing GDP and Import be stationary 2005 to 2010, which was characterized by the rapid changes and fluctuations. Secondly basing on this it shows that the export became stable after the second differencing this suggest that export are likely to have significant impacts on economic growth of Uganda but the nature of impact may be complex and influenced by various factors while the nature of DFI may be a less reliable driver of economic growth compared to export and import.

4.4.1 Multiple Regression Analysis.

A multiple linear regression analysis was created in which export, import, and FDI are regressed upon Uganda's GDP from 2000 to 2019 in order to validate the dependence of GDP on these three factors. The variable was first differenced in logarithmic form.

Table 5 Regression Model

Source	SS	df	MS	Number of obs	=	20
				F(3, 16)	=	103.71
Model	4.99985138	3	1.66661713	Prob > F	=	0.0000
Residual	.25711429	16	.016069643	R-squared	=	0.9511
				Adj R-squared	=	0.9419
Total	5.25696567	19	.276682404	Root MSE	=	.12677

lnGDP	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
lnEXPORT	-.1779912	.275267	-0.65	0.527	-.7615311	.4055487
lnIMPORT	1.121481	.2733542	4.10	0.001	.5419958	1.700966
lnDFI	-.197109	.1372954	-1.44	0.170	-.4881623	.0939443
_cons	-10.86156	1.155524	-9.40	0.000	-13.31116	-8.411957

4.4.2 Discussion of Results

The results of this regression basing on the table above it can be analyzed as; During the period 2000 to 2019 the contribution of export to Uganda GDP was found to be negative, lagged export with the coefficient of -0.1779912, P-value being 0.527 showing that it's statistically insignificant.

Secondarily Lagged import has a statistically significance relationship with GDP of Uganda as shown in a table (P-value 0.000, and coefficient of 1.121481) means 1% change in import is associated with 1.121481 increase in Uganda GDP holding other variables constant. Therefore this finding suggest that import has a positive significant contribution to the GDP of Uganda.

Thirdly the regression results above show that there was a negative significant relationship between DFI and Uganda GDP. The DFI to GDP ratio had a coefficient of –0.197109 implying 1% change would negatively affect the GDP by 19.17%.

Most studies have looked effect of international trade and not other parts like how import or export directly impact the GDP of a country. Forexample Isaac Musinguzi & Ibrahim K. Rapha (2019), investigated on the effect of international trade flow on economic growth of Uganda. The results indicated that import had a strong contribution to the economic growth of Uganda than export did. Therefore no empirical evidence that international trade affect the economic growth.

4.5 Summary of findings

The findings shown that import is significant influencing effectively economic growth of Uganda. Using the results above have indicated that 1% increase in import will result into 1.121481 increase in GDP of Uganda and therefore import has a positive significant effect on economic growth of Uganda while export and foreign direct investment basing on this study shows to have small influence on economic growth of Uganda.

4.6 Regression Analysis

Ninety-five (95%) percent of the variation in growth rate is explained by the independent variables "export", "import", and FDI (R-squared = 0.9511). The regression equation's result, as shown in the above table, indicates that the overall model is statistically significant (prob. = 0.0000) at the 5% level of significance.

The resulting regression equation is based on this outcome and is as follows:

$$\mathbf{lnGDP} = -10.86156 - 0.1779912\ln\mathbf{EXPORT} + 1.121481\ln\mathbf{IMPORT} - 6.389207\ln\mathbf{FDI} + e_t$$

The coefficients of the regressors which comprises of export are negatively associated with the dependent variable and a 1% increase in billion dollar in export is associated $-17.799% Billion decrease (β_1= -0.1779912) in GDP and it is statistically insignificant by its corresponding probability (P-value =0.527). On the other hand, a 1% change in billion dollar increase in import is associated with $112.148% Billion increase (β_2= 1.12148) in GDP and it is statistically significant by its corresponding probability (P-value = 0.001). While the coefficient of the regressor FDI is negatively associated with the dependent variable and a 1% change in billion dollar in FDI will lead to a decrease in GDP by $-6.389207 Billion ($\beta_3$= -6.389207) and it is statistically insignificant by its corresponding probability (P-value = 0.170).

The R squared is 0.9511 and a root mean standard error of 0.12676 implying that 95.11% percent of the variations in GDP growth rate is explained by the joint contribution of export, import and FDI. The remaining 4.89% are accounted for other variable that are not explain by the model (error term).

Due to the high R squared of 95.11 % the model this imply the model was fit for the analysis.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

A summary of the study is provided in this chapter. findings limitations and suggests policy measures and further areas of research.

Based on the findings, the study demonstrated that during the 20 years between 2000 2019, there was a linear increase in the import of goods and services (112.148 percent) and a negative, negligible linear impact on the export of goods and service and foreign direct investment (-17.799percent and -19.7109percent, respectively). That growth had an effect on the nation's economic growth.

5.2.0 Summary of findings

5.2.1 The relationship between Exports and GDP of Uganda.

The findings indicate a strong negative relationship between exports and Uganda's GDP growth. As evidenced by negative coefficient of -17.7991percent, as also reflected in the standard deviations, highlights the complex nature of export-led growth in Uganda (Munch, 2014).

5.2.2The relationship between Imports and GDP of Uganda.

The study reveals that imports have a noteworthy favourable effect on GDP growth of Uganda as evidenced by the high coefficient scores of 112.1481percent. These findings suggest that strategic imports, especially those that enhance industrial growth and technological advancement, are essential for sustaining economic development.

5.2.3The relationship between Foreign Direct Investment (FDI) and GDP of Uganda.

The findings demonstrate a strong negative relationship between Foreign Direct Investment (FDI) and Uganda's GDP growth, with negative coefficient of -19.7109percent. Basing on this results clearly show that FDI is not essential for Uganda's economic strategy and overall growth trajectory (Sengupta & Puri, 2018).

5.3 Conclusion

The findings from this study underscore the critical role that exports, imports, and Foreign Direct Investment (FDI) play in driving Uganda's economic growth. Exports, significantly have limited contribution to GDP growth (Munch, 2014). Similarly, strategic imports, especially of capital goods and technology, are essential for industrialization and overall economic performance Nidugala, (1990). Additionally, FDI emerges as a vital component in sustaining Uganda's GDP growth and enhancing

industrial growth, emphasizing the need for policies that attract and increase FDI inflows Sengupta & Puri, (2018).

5.4 Recommendations

The Ugandan government should prioritize and implement policies that enhance export diversification and promote value-added manufacturing. Given the limited impact of exports on GDP growth, as evidenced in this study, the government must provide targeted incentives, such as tax breaks and subsidies, to encourage the production and export of manufactured goods. Additionally, strengthening trade agreements and improving trade infrastructure will help Ugandan exporters access larger markets and compete globally. By focusing on diversified and value-added exports, the government can ensure sustained economic growth and reduce dependency on primary commodities, which have a more limited impact on GDP (Munch, 2014).

Ugandan businesses and industries should actively pursue opportunities to import advanced technologies and capital goods, which have been shown to enhance industrial growth and economic performance. As the findings suggest, these strategic imports play a crucial role in boosting GDP (Nidugala, 1990). To maximize the benefits, businesses should collaborate with international partners and leverage government support to acquire cutting-edge technology that can improve productivity and competitiveness. Additionally, industries should focus on upskilling their workforce to effectively utilize these technologies, thereby driving innovation and contributing to the broader economic development of Uganda.

International investors and development partners should recognize the vital role of Foreign Direct Investment (FDI) in Uganda's economic growth and focus on increasing their investments in sectors that drive industrial growth and sustainable development. As the study highlights, (Sengupta & Puri, 2018). Investors should target high-impact sectors such as manufacturing, technology, and infrastructure, which offer significant returns and contribute to long-term economic stability. Development partners can support these efforts by providing technical assistance and facilitating knowledge transfer to help Uganda build a more robust and diversified economy.

5.5 Areas of further research

Future research should explore the impact of export diversification on Uganda's economic resilience, particularly in the face of global market fluctuations. While this study highlights the importance of diversified exports for sustained growth, further investigation is needed to understand how different export sectors contribute to economic stability during periods of economic uncertainty. This research could focus on identifying specific industries that offer the greatest potential for diversification and analyzing their long-term contributions to GDP growth, employment, and poverty reduction, thereby providing actionable insights for policymakers and businesses.

Another key area for further research is the role of regional trade agreements, such as the East African Community (EAC), in enhancing Uganda's export performance. While this study emphasizes the importance of exports for GDP growth, there is a need to examine how regional trade agreements can facilitate market access, reduce trade barriers, and promote intra-regional trade. Future research could assess the effectiveness of these agreements in boosting Uganda's export volumes and identify strategies to maximize their benefits. This would provide valuable insights for policymakers seeking to leverage regional cooperation for economic growth

5.6 Policy Implications

The findings have significance policy implications in promoting or boosting the GDP of Uganda. Lack of proper management of resource strategies as shown in this study, will always lead to reduced export of goods and service produced in Uganda. Therefore policy makers need to ensure that policies made should focus on boosting export, policies should focus on promoting home industries to be able to compete in the international market.

Direct Foreign Investment (DFI) and import need to be put clear as macroeconomic factors. Uganda government should seek to ensure import and DFI are well managed. Managing import and DFI will impact the economic growth of Uganda positively

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APPENDICES

Appendix 1

Variable	Obs	Mean	Std. Dev.	Min	Max
GDP	20	590.3517	263.0789	235.853	897.5097
EXPORT	20	2.05e+09	1.15e+09	4.50e+08	4.10e+09
IMPORT	20	5.19e+09	2.79e+09	1.41e+09	9.80e+09
DFI	20	6.85e+08	3.63e+08	1.51e+08	1.30e+09

GDP

	Percentiles	Smallest		
1%	235.853	235.853		
5%	238.861	241.8689		
10%	246.2798	250.6906	Obs	20
25%	311.5378	257.8296	Sum of Wgt.	20
50%	759.931		Mean	590.3517
		Largest	Std. Dev.	263.0789
75%	821.3913	824.7377		
90%	850.638	837.0959	Variance	69210.52
95%	880.8449	864.1801	Skewness	-.2709046
99%	897.5097	897.5097	Kurtosis	1.243632

EXPORT

	Percentiles	Smallest		
1%	4.50e+08	4.50e+08		
5%	4.59e+08	4.67e+08		
10%	4.73e+08	4.78e+08	Obs	20
25%	8.87e+08	5.72e+08	Sum of Wgt.	20
50%	2.27e+09		Mean	2.05e+09
		Largest	Std. Dev.	1.15e+09
75%	2.82e+09	2.92e+09		
90%	3.54e+09	3.45e+09	Variance	1.32e+18
95%	3.87e+09	3.64e+09	Skewness	-.060948
99%	4.10e+09	4.10e+09	Kurtosis	1.831893

IMPORT

	Percentiles	Smallest		
1%	1.41e+09	1.41e+09		
5%	1.43e+09	1.45e+09		
10%	1.50e+09	1.55e+09	Obs	20
25%	2.14e+09	1.58e+09	Sum of Wgt.	20
50%	5.74e+09		Mean	5.19e+09
		Largest	Std. Dev.	2.79e+09
75%	7.43e+09	7.75e+09		
90%	8.25e+09	7.77e+09	Variance	7.79e+18
95%	9.26e+09	8.72e+09	Skewness	-.1325529
99%	9.80e+09	9.80e+09	Kurtosis	1.583412

DFI

	Percentiles	Smallest		
1%	1.51e+08	1.51e+08		
5%	1.56e+08	1.61e+08		
10%	1.73e+08	1.85e+08	Obs	20
25%	3.38e+08	2.02e+08	Sum of Wgt.	20
50%	7.33e+08		Mean	6.85e+08
		Largest	Std. Dev.	3.63e+08
75%	9.75e+08	1.06e+09		
90%	1.15e+09	1.10e+09	Variance	1.32e+17
95%	1.25e+09	1.21e+09	Skewness	-.0679809
99%	1.30e+09	1.30e+09	Kurtosis	1.888125

DATA IN BILLIONS THAT WAS USED FOR THE ANALYSIS AND WAS ABTAINED FROM THE WORD BANK DATABASE

YEARS	GDP	EXPORT	IMPORT	DFI
2000	257.8296057	449900000	1408500000	160700000
2001	235.8529749	467237907.7	1454758836	151496150.7
2002	241.8689302	478169944.7	1548815724	184648059.2
2003	250.6905884	572217735.8	1578684411	202192593.6
2004	292.4726656	759123292.3	1919290367	295416479.8
2005	330.6028544	1015857576	2354409834	379808340.7
2006	346.7684623	1175873033	2986057428	644262499.9
2007	401.7091876	1764969158	3935415978	792305780.9
2008	473.3028334	2207628743	5300164303	728860900.7
2009	799.9296321	2326561994	5228194441	841570802.7
2010	824.7376711	2163974071	6178347674	543872727.3
2011	837.0958842	2519126643	7459582640	894293858
2012	796.7111394	2810480877	7746303769	1205388488
2013	819.7578673	2828714740	7401757845	1096000000
2014	897.5097286	2724773133	7774532182	1058564540
2015	864.1800593	2667186167	7311877263	737652140.2
2016	753.6844055	2921246771	6507220828	625704361.9
2017	766.177604	3449910975	7231400549	802704141
2018	793.1280822	3636182324	8724862646	1055353353
2019	823.0247329	4095646135	9795257001	1303005005