

**T.C**

**ISTANBUL COMMERCE UNIVERSITY  
GRADUATE SCHOOL OF SOCIAL SCIENCE  
DEPARTMENT OF ECONOMICS**

**THE IMPACT OF INTERNATIONAL TRADE ON ECONOMIC  
GROWTH IN UGANDA**

**Master's Thesis**

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**Istanbul, 2022**

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**SUPERVISOR BY:  
PROF. DR. AYDIN ÇELEN**

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## **ABSTRACT**

The study's main goal was to investigate the impact of international trade on Uganda's economic growth, taking into consideration key economic growth and international trade indicators. For this inquiry, secondary data was gathered. From 1988 through 2019, we used GDP, FDI, inflation, as well as exports, imports, and trade. The ARDL model was created utilizing the study's short- and long-term interactions between components in order to satisfy the project's objectives. Exports and economic growth have a significant positive association, according to the findings of the exports to economic growth research. In addition, there is a substantial negative connection between inflation and GDP and other factors. Exports and GDP had a substantial association coefficient when compared to trade and economic growth. Except for inflation, where the data demonstrate a substantial negative correlation between GDP and inflation, and also there was a significant positive link between GDP and the studied variables.

The study recommends that it is vital that policymakers encourage domestic companies to produce goods and services for exports in order to boost economic growth, this is in line with Keynesian theory which advocates for strong government intervention to foster the development of Uganda Foreign Direct Investment and to also ensure that the activities of these investors contribute positively towards Uganda's economic growth. Laws should be enacted to encourage exporters and limit importers to import only those goods and services which are to serve as input for increased productive activity in the economy thereby contributing positively towards GDP.

Keyword; International trade, FDI, Inflation rate, Import, Export, Trade, Economic growth

## ÖZET

Bu çalışmanın başlıca amacı, temel ekonomik büyüme ve uluslararası ticaret göstergelerini göz önünde bulundurarak uluslararası ticaretin Uganda'nın ekonomik kalkınması üzerindeki etkisini araştırmaktır. Bu sorgulama için, ikincil veriler toplandı. 1989 ve 2019 arasında, GSYİH, DYY, ve enflasyona ilaveten ithalat, ihracat ve ticaret kullandık. Projenin amaçlarını gerçekleştirmek için, bileşenler arasında çalışmanın kısa ve uzun dönem etkileşimlerini kullanarak, ARDL modeli oluşturuldu. Ekonomik büyüme ile alakalı ihracat araştırması sonuçlarına göre, ihracat ve ekonomik büyüme arasında önemli bir pozitif ilişki vardır. Ayrıca, enflasyon ile GSYİH ve diğer faktörler arasında önemli derecede negatif bağlantı vardır. Ticaret ve ekonomik büyümeye ile mukayese edildiğinde, ihracat ve GSYİH önemli bir ilişki katsayısına sahiptir. Enflasyon haricinde, verilerin GSYİH ile enflasyon arasında önemli bir korelasyon gösterir, ve GSYİH ile incelenen değişkenler arasında önemli bir pozitif bağlantı vardır.

Çalışma, ekonomik büyümeyi artırmak için politika yapıcıların yerli şirketleri ihracata yönelik mal ve hizmet üretmeye teşvik etmelerinin hayati önemde olduğunu önermektedir; bu durumda Uganda Doğrudan Yabancı Yatırımın gelişimini teşvik etmek için hükümet müdahalesini savunan Keynesian teorisi ile uyumludur. Ayrıca, yatırımcılar bu faaliyetleri Uganda'nın ekonomik kalkınmasına olumlu katkı sağlamaktadırlar. İhracatçıları teşvik edecek ve ithalatçıları sadece ekonomide artan üretken faaliyet için girdi olarak hizmet edecek ve böylece GSYİH'ye olumlu katkıda bulunacak mal ve hizmetleri ithal etme konusunda sınırlama yapmak için yasalar çıkartılmalıdır.

**Anahtar Kelimeler;** Uluslararası ticaret, DYY, Enflasyon oranı, İhracat, İthalat, Ticaret, Ekonomik büyüme

## **DECLARATION**

I certify that this graduation thesis is the result of my own initiative and effort and has not been nominated for any reward. All other sources of information have been credited.

Name: Mohamed Abdisalan Ahmed

Signature: \_\_\_\_\_

Date: 07/01/ 2022



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To begin, I would want to express my gratitude to Allah for assisting me through each tough scenario encountered throughout my study and allowing me to reach the conclusion of my research. Second, I'd want to thank my academic adviser PROF. DR. AYDIN ÇELEN, who helped me overcome every writing challenge. I'm certain that this work would not have been completed without him, and I can't thank him enough.

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## **LIST OF ABBREVIATIONS**

ADF	Augmented Dickey-fuller
ARDL	Autoregressive Model
ECM	Error Correction Model
FDI	Foreign Direct Investment
GDP	Gross Domestic Production
NRM	National Resistance Movement
OLS	Ordinary Least Square
PP	Phillip Person
R&D	Research and Development

## 1. INTRODUCTION

As we all know, every country on the earth strives to develop its economic and social richness in order to provide a better life for its citizens and a brighter future for its youth by offering high-quality education and business opportunities. To keep such things in balance, countries must engage and take steps to improve infrastructure that aids in the operation of economic variables, hence boosting economic growth. Uganda seems to have a modern economy that is full regular assets as well as one of the world's quickest growing and most youthful populaces. Uganda has opportunities in agriculture, which gives it a competitive edge, and it also has a 1.5-billion-dollar oil reserve. Uganda has a free trade and foreign exchange policy. Nonetheless, widespread corruption, mismanagement of funds, an oppressive tax structure, and rising political persecution expressed concern regarding the government's ability to creating a stable and investor-friendly climate. Foreign enterprises and investors face additional risks as a result of mid- to long-term political instability.

International trade permits nations to offer to sell locally produced things to outside nations; it is the buying and selling of commodities and service between nations. (Abdullahi, et al, 2013). Economic growth is described as a growing market value of commodities, the people able to purchase things that can be supported through time.

International trade is defined as trade that occurs beyond national borders. The expanding amount of international commerce and the reduction of trade barriers have sparked discussion and study about the influence of international trade on countries' economic growth. Historical evidence shows that countries that are globally active are more productive than ones that just manufacture for the home market. (Toyebi et al., 2012)

The association of international trade with economy has been studied since classical era. the relations become positive effect on economic growth because international trade leads, increasing technology and capital as well as productivity also this effect makes better benefit for everyone. Economic growth has consistently existed since forever, yet its speed has changed from slow and sporadic to dynamic, fast, and steady, particularly following the Industrial Revolution (Baines, 2003). Following the Industrial Revolution, trade flows

experienced a significant increase, prompting some writers to propose it as an explanation for economic expansion. In today's endogenous growth models, this phenomenon is becoming increasingly relevant. International trade has become one of the key engines of growth, as indicated to Grossman and Helpman (1991), and as well as Afonso (2001), since it allows for technical transferences from industrialized to developing nations.

International trade is important because no single country can provide all of the goods and services that people need. As a result of this trading connection, the economy must sell goods and services to pay for things that are purchased at home.

### **1.1. Background of the Study**

International trade is purely the exchange of the goods and services between nations all over the world. For international trade requires to have at least two nations must engage in cross-border trading operations (Adedeji, 2006). However, economic development is the process through which a country's true per capita income rises period of time over a long. Therefore, growth happens when a country's productive capacity expands, allowing for the creation of more products and services (Awe, 2013). Countries trade with one another because of differences in natural resource endowment, financial capital, human capital, and technical skills. Some countries have more resource endowments than others and possess abundant resources. However, they might not can adequately oversee and guide them for their potential benefit, which denies them the chance to accomplish fundamental development and advancement limits and great expectations for everyday comforts for their residents. The meaning of global exchange emerges from the way that no single nation can solely deliver generally labor and products vital for its own utilization, because of asset requirements and differentials.

Globalization largely determines that economic growth have impact of international trade. Developing countries that adhere to trade liberalization policies have favorably benefited from the impact of international trade and globalization. International trade creates global market opportunities for entrepreneurs in developing nations. It also enables businesses operating in these countries to easily access latest technologies. Further, it enhances

competition at the local and international levels. An undeveloped country that hasn't made much progress in global trade has slowed the growth of huge amount of investment in advanced capital venture equipment because specialization is limited by the size of the market. Interestingly, a country that essentially participates in worldwide trade has high possibilities for becoming industrialized and making no consideration for conventional tactics for creation (Thirlwa, 2000).

Exports are goods and service produced by a given country and purchased by the citizens or governments of different countries. This normally happens when the exporting country produces the on demand products in excess and effectively meets the demand of its citizens and the surplus is sold to countries in need of the same product (Fourie & Philippe, 2009).

In Uganda, the export sector may be divided into two categories: the first is manufactured items such as coffee, cotton, tobacco, and tea, which are all considered export products. Second, since the National Resistance Movement (NRM) assumed control in 1986, non-traditional exports have gotten a lot of attention. The NRM administration supported non-traditional exports in order to expand the country's export base and enhance foreign exchange profits Uganda's second largest export industry, Fish, iron, steel, gold, sugar, maize, and fish products, as well as flowers, may be considered non-traditional exports, which can help the nation diversify its economy and reduce its reliance on certain commodities. Uganda's Economic Outlook 2019).

Imports are goods and service purchased into the country from different foreign countries. This normally happens when the importing country does not have the capacity to produce its own products or the products it produces cannot meet the demand of its citizens or the cost of production is significantly high (Fourie et al., 2009).

Economic growth is defined as an increase in real per capita income that can be sustained over time (Clunnies, 2009). Economic growth has been partly aided by international trade flows in various economies such as China and India. The last decade has been an exceptionally decent one for emerging nations as their economies have expanded at unprecedented rates, the bulk of this unmatched performance was seen in China, India, and

a few other Asian, and African countries. In terms of economic growth, China and India are the two fastest-growing countries. Although the two nations have many similar characteristics, their economic development differs in terms of chronology, intensity, and development methods. However, both countries have profited in the long run by opening up to foreign commerce.

International commerce has the ability to boost a country's economic growth, as measured by GDP. International commerce is defined as the total of exports and imports over GDP, according to a prior analysis by Habib (2017). International commerce, as indicated in export and import activity, has a significant impact on a country's economic growth.

Depending on the economic structures in place to manage the trade, the nature of the relationship between world trade and a country's economic development may be either positive or negative. In today's world, almost no country can survive on its own without forming economic alliances with other countries. Classical and neoclassical economists have focused a lot of emphasis on international trade as a cause of economic growth. (Yemi, 2014).

Despite the numerous benefits of trade flows, this has resulted in international trade having a limited beneficial impact on Uganda's economic growth. Thus these benefits cannot be directly translated into economic growth due to various macroeconomic policy distortions resulting from international trade of which seems to be turning the country into an import dependent economy due to the increased rise in import from US\$27 million in 2014 to US\$ 28 million in 2015.

Economic growth in Uganda has been a contentious issue primarily because Uganda as other developing countries, aims at raising the level of GDP in their economies through finding the most efficient means of increasing their productivity. Uganda is a country blessed with huge deposit of raw materials and a very fertile land accompanied with good weather condition for agriculture. Uganda almost completely relies on the exportation of mainly major products which are characterized by lower prices, unfortunately putting

Uganda is at the receiving end of an imbalanced trade environment that benefits developed countries.

Uganda is also categorized as an import dependent country, which imports a lot of items, most of which does not contribute to its GDP; some of these items are finished goods such as clothes and fruits juice. There are also claims of damages to domestic industries, which result from importation of inferior like domestic products which have low price leading to the neglect of local products thereby reducing the output level of such industries contribution to GDP (Musinguzi & Rapha, 2019).

For a considerable length of time, discussions have seethed concerning the significance of global trade in empowering economic growth and, specifically, usefulness. Countries that participate in global business will in general be more useful than those that simply take part in domestic exchange. For example, admittance to outside business sectors have significantly changed a country's economy because of the results of globalization and advancement. Subsequently, in the present globalized world, because of global trade, it would be very necessary to look into how it affects economic growth. The study will assist us figure out where the functionality and growth in global trade comes from. Because of this, the study will be looking at how international trade affects Uganda's economic growth.

## **1.2 Problem of Statement**

The relevance of international trade in encouraging economic growth has elicited a variety of responses from economists and policymakers throughout the years. Despite the fact that many experts have extensively discussed the association between trade and economic growth for more than two centuries, there remain disagreements over their real consequences (Obadan & Elizabeth 2007). International commerce, it is believed, allows a country to increase or expand its market coverage and obtain goods and services at reasonable rates that are not readily available to customers locally. As a result, several scholars have endeavored to demonstrate the connection between international trade and economic growth, as well as whether international trade may increase a country's GDP. Many scholars believed that nations involve in global trade have a greater chance of

occurring to see a specific degree of economic growth than those that divert their resources away from international trade (Carbaugh, 2011).

In recent years, the Ugandan government has seen either negative or slow per capita income growth, resulting in a decline in GDP, worsening the balance of payments, debt and financial problems, and deteriorating competitiveness. Sub-Saharan African nations have been severely disadvantaged as a result of their opaque and distortive international trade regulations. The study's goal is to find out how international trade affects economic growth.

- To determine the impact of trade on economic growth in Uganda
- To assess the impact of exports and imports on the economic growth Uganda
- To ascertain the relationship between FDI, inflation rate and economic growth in Uganda

### **1.3 Scope of the Study**

The research is concerned with international trade and Uganda's economic growth. The study basically focuses on specific aspects that affect international trade as well as economic growth; the study takes into account exports, imports, and inflation, as well as trade and FDI as factors to measure the country's economy. The scope of these variables will be restricted by the availability of data; the study will employ yearly data from World Bank data indicators, and the time series data will be from 1988 to 2019.

### **1.4 Significant of the Study**

The primary goal of this thesis is to examine the impact of international trade on Uganda's economic growth from 1988 to 2019. Some studies focus just on exports, but this study have crucial factor include imports, trade, FDI, and the rate of inflation. This dissertation examines the influence of international trade on economic growth using FDI, inflation rate, trade, as well as exports and imports of products and services.

## **2. LITERATURE REVIEW**

This section of the study will address other scholars who had conducted similar studies in international trade and economic growth. This section includes theoretical analysis, Uganda's economic growth, and FDI. This section will also examine the current inflation rate in Uganda, specifically how this inflation affects Uganda's economy.

### **2.1 Theoretical Review**

There are a lot of studies analysing the association between trade and economic growth. This connection was initially made by Adam Smith in 1776 with his classic concept, named the commodity of surplus. This hypothesis was developed during the Second World War, at a time when domestic located and protectionist development arrangements were well understood. After the 1960s, because of the disappointment of these strategies and the requirement for fast financial development in terms of professional career advancement, new hypotheses were brought into the monetary writing by specialists and theory support the possibility that worldwide trade arrangements assume a crucial part in economic development (Afonso, 2001).

In the writing of global trade, the relations among commodity and development are characterized by the distribution of planned development projects. This clarify that there is a positive connection among commodity and public item, and in this way, the product situated standards add to economic development. The hypotheses of worldwide trade inspect the stream limit of global labor and products, and the commitment to the economics of these streams Similarly, these theories define why governments manage foreign currency and what the advantages and disadvantages of commodity and import are. An astonishing amount of hypotheses have been offered to discover answers to these queries. The major argument for worldwide exchange was considered as increasing the load of important metals in the commercial framework. In general, the prevalent belief is that imports should be reduced as far as possible while commodities should advance. In accordance with this concept, the government should provide standards for the use of foreign exchange strategy equipment (Kuyucuklu, 1982).

The ideas of the comparative advantage method are accepted by neoclassical international trade theory. Export, according to neo-classical economists, makes a significant contribution to economic growth since it has a favorable impact on economic development by raising investment and attaining technical advancement. Furthermore, export expands the market, and as a result, a country's welfare might improve (Kavoussi, 1984).

In spite of the mercantilist theory, in the premise of straightforward advantage and it is assured that streamlined trade is beneficial to all countries involved. As indicated by Smith (1776), it is more beneficial for nations to participate in global exchange than to have a closed economy. David Ricardo, as an individual from a similar school as Adam Smith, put together global exchange with respect to relative benefit rather than outright benefit. As per Ricardo, nations don't have to enjoy outright benefits to take part in foreign exchange.

### **2.1.1 Economic Growth**

Solow (1956) established a production function with constant output is used as the basis for an exogenous growth model. returns to scale and continuous population expansion, which connected output to fundamental factors production. As per Solow's theory, the economy follows a balanced development path for which the rate of technological progress dictates the pace of growth in production per capita. After reaching the balanced growth path, technological innovation permits capital to grow without reducing marginal productivity, resulting in long-term positive rise in production is achieved. Regardless of Solow's breakthrough, the theory has a major flaw: the model does not specify the parameter of output growth rate, which captures all that is not described by capital and labor, including prospective salaries and bonuses from international trade.

New models arose as a result of this line of thinking, including technical advancement as an informative variable of economic development and endeavoring to clarify what Solow's model. The endogenous development models by Romer (1990), Grossman and Helpman (1991), and as well as (Aghion et al, 1992), among others, are instances of such models. Romer (1990) added benefit looking for research and development exercises and flawed contest in the capital products area to his model. Creation is a component of capital, work,

and innovation in this situation also; in any case, there are two regions, one that produces stock and the other that spotlights on innovative work; both utilize capital and work; and both use the whole inventory of development available.

A rise in export can be characterized as the primary factor of economic growth. In regard to the theoretical logic of this model, it is stated that at least four ways may be specified in the hypothesis of export-led growth (Bilgin & Sahbaz, 2009). The first is linked to Keynesian theory, which is derived from a foreign trade perspective. Through the international trade multiplier, export can lead to a growth in output such as consumption, investment, and public expenditure in an open economy with unemployment and idle capacity. Making the required investments for expansion and delivering intermediate products to continue production, according to the second method, is contingent on emerging nations' import capacity. In the third strategy, increasing exports can boost productivity, allowing the export sector to contribute to the growth of export commodity specialization. Finally, for capital-intensive industrial businesses, the fourth method is based on economies of scale.

Grossman and Helpman (1991) created a model in which development is achieved by combining two conditions: differentiated products production and purposeful knowledge acquisition. The authors have proposed a North-South exchange model which the advanced North takes part in inventive research and development exercises prior to exporting the products delivered to the less grown South; later, the North's advancement is imitated by the South, permitting northern makers to move to new assembling norms and new imaginative merchandise. Accordingly, global exchange is a significant piece of securing information and creating economies. Since, as the model illustrates, when a nation partakes in worldwide business, it accesses a further developed wellspring of information, which it then, at that point, uses to acquire extra data sources and increment usefulness, prompting expanded item and administration creation and consequently turning into a greater and all the more remarkable contender. Dinopoulos and Segerstrom (2006) likewise progressed a North-South trade model their decisions are identical to the previous', notwithstanding, these authors be able to drive above and beyond by taking a gander at the government

assistance ramifications of three elements of globalization: increased South-South trade, reinforced intellectual property protection, and lower trade costs.

There is no capital accumulation in the work of labor is continuous (Aghion, et al, 1992), and dispersed amongst R&D and capital goods production, while innovation is defined as the creation of a new intermediate good that replaces an older one. They make the argument that growth is generated by a random series of quality-improving advancements that may arise from research efforts, resulting in both positive and negative environmental costs such as continuous inventive advancement and the regeneration of an old outdated social innovation by a new one, among other things.

Finally, in order for technical advancement to fully effect economic growth, it must first be integrated by the economy; hence, according to some authors, technology absorption capability plays a role in the economic developmental process and is reliant of the country's human resources assets. This perspective may be considered as a supplement to the endogenous development theories that have effectively been inspected. Nelson and Phelps (1966) associated financial development to the supply of human resources, as a means of advancing the spread of mechanical technology and discovering new economies of scale. Benhabib and Spiegel (1994), found in their that human capital has no influence per capita rates, except when it has an effect on total factor productivity growth.

Economic growth in Uganda has been a contentious issue primarily because Uganda as other developing countries, aims at raising the level of GDP in their economies through finding the most efficient means of increasing their productivity. Uganda is a country blessed with huge deposit of raw materials and a very fertile land accompanied with good weather condition for agriculture. Uganda almost completely relies on the exportation of mainly primary products which are characterized by lower prices, unfortunately putting Uganda at the wrong end of unbalanced trade environment that favors nations which are already industrialized.

### **2.1.2 The Eli Heckscher and Bertil Ohlin Theory (The H-O Theory)**

The Heckscher-Ohlin theory explains why countries engage in labor and product exchanges with one another and emphasizes the fact that nations have distinct asset enrichment constraints. The near advantage of a country is determined by both formation innovations which determine how much various parts of creation are employed during the course of creation and the association of a country's assets, that is, the total bounty of creation elements. A country that has a greater portion of a given asset is supposed to be plentiful in that asset, and will in general create more items that use that equivalent asset. Subsequently, a nation has more effectiveness in assembling merchandise for whose necessary assets are accessible in plenitude.

According to the Heckscher-Ohlin hypothesis, trade enables each country to practice on what it is normally capable of. Nations provide goods that they are typically capable of delivering in exchange for goods that they are less capable of producing. Changes in the average cost of goods have a significant impact on the relative compensation that nations receive from these assets. International trade also has a significant impact on the distribution of salaries. The model's primary premise is that labor and capital flows are unrestricted between regions that the measures of work and capital in two nations differ, that trade is streamlined, that innovation is relatively comparable across nations, and that tastes are similar.

Later in the 1950s, new theory was developed because it became too difficult to explain the world's tradable goods with a single theory for a long time. (Takim, 2010).

There some investigations on the link between trade and economic growth, both theoretical and in the form of tests. Several studies including Michaely (1977), Balassa (1978), Hammer (1987), and Frankel and Romer (1996). The traditional business professionals have highlighted that ware may be viewed as a progress machine. Exchange-organized improvement has grown steadily since the 1960s, with nations that have adopted this approach experiencing high product pay. Similarly, they've been able to expand their

growth rates. The use of import substitution has been shown to slow the progress of countries that pursue trade-based development programs (Harrison and Revenga, 1995).

According to Heckscher-thesis, Ohlin's developing nations should export items that are utilized in places where there is a surplus of production and import products that are used in areas where there is a shortage of production, such as labor and natural resources (Jones, 1956). Although several models were created to illustrate the Heckscher-Ohlin model's analytical validity, the basic function of variables in terms of international commerce remained intact.

## **2.2 Trade and Economic Growth**

The classics, Adam Smith and David Ricardo, first underlined the importance of international commerce in the development process. Wider markets, according to Adam Smith (1776), would lead to more capital accumulation and technical advancement, enhancing the division of labor and productivity, and therefore supporting economic expansion. Foreign markets, according to David Ricardo (1817), might not only assist nations specialize in items with lower opportunity costs and a larger comparative advantage, but they could also help countries postpone the inevitable drop in profit rates induced by increased wages and land constraints, resulting in larger welfare gains.

Globalization has led to greater openness and elimination of trade obstacles in all nations, but this does not always mean that all countries have profited equally. Openness to trade has long been associated with economic growth, according to Gries and Redlin (2012), who examined the short- and long-term trends in 158 industrialized and developing countries. They found that this trend has persisted since the early 1990s, indicating that encouraging trade is a sound strategy for long-term prosperity. This link is negative for low-income countries in the short run and positive for high-income countries in the long run, indicating that low-income countries may miss out on the benefits of international integration despite through a short-term adjustment process. Yanikkaya's (2003) paper, which examines the growth effects of various measures of trade openness for 100 industrialized and developing economies and concludes that trade restrictions, as well as trade volumes, have a substantial

and positive impact on growth. This is especially true in developing nations that utilize trade barriers to redirect productive resources to areas where they have a competitive advantage. However, it's important to pay attention to the openness measures, as Rodriguez & Rodrik (2001) noted in their review of several studies that there is a trend to exaggerate the influence of trade openness on economic development, particularly when weak trade barrier assessments are used. In Yanikkaya's example, the utilize of a variety of openness measures may demonstrate the conclusions are accurate. According to Thirlwall (2000), extensive trade liberalization improves economic performance, with exports serving as a key driver of this improvement in economic performance. The higher the technical intensity of a country's goods produced and traded, the greater the potency of this catalyzer, countries that produced and export would become primary items expand at a slower rate than those that generate and trade manufactured products. The fact that some aspects of trade liberalization, such as Customs Unions, may reduce welfare if economic interdependence replaces trade and investment is recognized by Thirlwall, and as a result, he allows for the execution of some protection obstacles, particularly by African economies, to aid countries in becoming much more democratized, but only at a slower rate.

During the most recent thirty years, the connection between trade openness and economic development has stood out enough to be noticed in the hypothetical and experimental writing. In any case, there is little settlement on whether expanded trade openness helps economic objectives. For example, if one country wants to trade with another, it will make products in which it has the "comparative advantage." A lot of its power comes from the fact that it has a lot of different kinds of good things and can make more things for a bigger group. So, this area's production and goods will keep growing, which will help the overall economy grow. People who agree with Krueger (1978) and Bhagwati (1978) about the benefits of trade liberalization say that it encourages specialization in businesses that have economies of scale, which helps improve efficiency and effectiveness over time. Because of the spread of creative ideas around the world (Coe and Helpman, 1995) and (Grossman and Helpman, 1991), new endogenous growth models show that trade openness leads to economic growth (Romer, 1994). A country that is more transparent has a better chance of

taking advantage of new ideas that come from more modern economies, which allows it to grow faster than a country that is less open.

Numerous experts have concentrated on the association between trade and economic growth as a result of the economic influence of international trade. From one perspective, a few authors focused on how exchange progression can help economic development; however, they also believe that accelerating financial progression through the implementation of exchange barriers in key areas where the nation enjoys a relative advantage can result in improved government assistance, even in less developed nations. However, a few scholars investigated and scrutinized the product-driven development ideas for an extended period of time, with the concept being proved at times (Ramos, 2001).

### **2.3 The Effect of Imports on Economic Growth**

Economic growth and imports are thought to have a negative relationship because most expenditure on imports reduces national income resources. Nonetheless, economists contend that imports impact GDP because they enable a country to acquire the factors of production which it cannot generate on its own or within its geographical boundaries due to lack of the requisite skills/workforce and technology, etc. According to Grossman and Helpman, (1991) and Ram (1990), imports are the key diffusion pathway for international trade in capital and technology because technical knowledge that is imported may potentially increase local levels of production. Imports also facilitate economic activities between people of one nation and citizens of other countries.

Imports affect GDP growth in three main ways. First, the importation of intermediate capital goods leads to economic growth by increasing a country's productive capital stock levels. Secondly, importation increases GDP by enabling countries with low levels of technical expertise, particularly developing countries to implement advanced technological inventions from developed countries that have higher technical expertise. Thirdly, through imports, countries get the opportunity to learn from each other, gain access to more efficient technologies for resource allocation which has the potential to increase productivity and raise national revenue levels (Coe et al., 1993)

Imported inputs may still be necessary to produce the high-quality items needed for export markets, but authorities should consider the possible impact on employment. In Rwanda, a neighboring nation to Uganda, the influence on employment was investigated. It was discovered that companies that import a lot employ more people than companies that don't import a lot. While these facts may or may not apply in Uganda, they are currently the most relevant information accessible when attempting to link import to economic growth. At the same time, ensuring that businesses have appropriate access to the goods they require is critical in this situation. Imports are used in all areas of the economy, not only the export industries, which constitute a smaller percentage of Uganda's economy. As a result, measures to increase import access or expedite imports benefit industries such as transportation, tourism, hotels, construction, services, and manufacturing. Imports are used by businesses to acquire access to higher-quality, higher-technology inputs needed to manufacture the high-quality items required for export (Frazer, 2017).

China was the 11th biggest economy in the world when market reforms were implemented in 1978, accounting for barely 2% of global GDP. After thirty years, China has outperformed Japan as the world's second greatest economy, accounting for 10% of global GDP. It has expanded at a rate unmatched by any other country during the previous few decades. International business has been a significant contributor to this country's economic progress. China has transformed from a closed economy to the world's top exporter since opening its doors in 1978. This precipitous rise has resulted in substantial changes in Chinese imports, it is frequently asserted that China's economic ascent has a domino effect on the rest of the globe. China has become the world's largest exporter due to developing comparative advantages in specific products (Munch, 2014).

#### **2.4 The Effect of Exports on Economic Growth**

Several past studies on trade and development have emphasized on the role exports play in accelerating economic growth. These studies argue that exports facilitate economic growth by ensuring economies of scale, facilitating efficient resource allocation, enhancing capacity utilization, and enhancing productivity and the distribution of technological

knowledge and innovations. In light of this development, most nations worldwide incorporate export-oriented policies in their growth strategies.

The connection between the performance of exports and economic growth has attracted the thoughtfulness of development economists, and it drive continue generating controversies about whether or not export performance significantly impacts on a country's economic growth. According to Awoluse (2008), when external demand for local exportable goods increases, a country achieves overall growth in output due to increased income as well as employment in exporting sectors. Exports facilitate the redistribution of resources from non-trade industries which are inefficient to trade-oriented sectors, and the diffusion of efficient production techniques and management styles throughout the economy. Giles and Williams (2002) note that the spillover of growth in export sector would benefit the entire economy and that an increase in exports improves the balance of payment, increases the importation of investment goods, and facilitates the growth of domestic production.

Numerous researchers have examined the link between economic growth and export, which is a critical component of global commerce. According to the majority of examinations, export has a beneficial effect on economic development (Ullah et al., 2009). While trade-driven progress has been extensively concentrated slowly, the direction of causality is still a point of contention. Certain contemporary efforts may undergo dramatic alterations as a result of learning, inventive modernizations, encounters, and innovation assignment through FDI in a developing economy. It is possible to build development under these conditions, regardless of whether there is no administration strategy that endeavors to achieve advancement through supporting streamlined commerce arrangements. Manufacturers can export surpluses if local demand does not keep pace with output growth in these thriving industries. As a result, a country's economic growth might boost export growth. However, if domestic demand develops faster than modern industry, commodities may be able to survive. As a consequence, increased domestic demand leads to a rise in local production that is followed by a decline in exports, hence, rising output may have a negative impact on the country's product efficiency (Lee and Huang, 2002).

According to Yuan et al. (2014), the influence of international trade and financial development on economic growth has emerged as a popular research topic in recent years. According to the basic theoretical framework of factor endowment, companies may strengthen their capacity to withstand liquidity shortages by increasing exports of commodities that are heavily reliant on external finance and expanding the volume and structure of trade output. Several researchers, including Rajan and Zingales (1998), believe that a relative beneficiary theory of financial development might assist businesses in preventing moral hazard and adverse selection issues, as well as increasing export growth with the assistance of foreign financing companies that rely on outside funding obtain a competitive edge through financial development. In nations with a higher degree of financial development, such industries are more likely to have higher growth rates and larger export shares, as well as get greater trade benefits.

In 2018, most of the goods made by rich countries were exported. There were a lot of less developed countries that exported to the United States (US\$1.4 trillion), China (US\$1.1 trillion), and other Asian countries (US\$36 billion). In comparison to other countries, Haiti and African countries with the fewest resources sold goods worth US\$25.7 billion to China. Exports from Asia's least developed countries were sent to the United States, not the other way around. Since the turn of the century, the European Union has greatly demonstrated its significance as a trading partner for least developed countries in Asia, with exports amounting to US\$49.9 billion in 2018. Intra-regional trade for least developing countries in the Pacific and East Asia is also high, while that for least developing countries in other regions is low, but steadily increasing (UNCTAD, 2020).

Between 1960 and 1966, Asian economies experienced rapid growth accompanied by significant changes in economic structures. On the other hand, East Asian economies such as Taiwan, Korea, Hong Kong, and Singapore transformed from poor and technologically-impooverished economies to relatively wealthy and modern economies. During the growth period, per capita income in each of these countries grew fourfold, a process that took the United States, Germany, France, and the United Kingdom approximately eight years to achieve. The phenomenal growth is commonly known as “The Asian Miracle”, because the

economies of countries that experienced it virtually surpassed all other economies with comparably higher income and productivity levels in 1960. The economic success in East Asia resulted from the adoption of outward-oriented policies that in turn emanated from reliance on free trade. Initially, countries such as Singapore, Taiwan, and Korea began with import substitution, but later shifted to more liberal policies that provided substantial incentives for exports, and at the same time lowered trade barriers. Consequently, individual companies had greater incentives to engage in exports rather than just domestic markets (UNCTAD, 2020).

Lin and Li (2002). They look at how products in China affect the country's economy, as well as what happens when there are more of certain things to evaluate the immediate and circuitous affects of commodities in general economy. The primary study concludes that commodities are critical to China's economic development because, in addition to having a strong direct association with growth, the overflow effects that commodities have on other important indicators also contribute to sustain growth. They also know that China's monetary system is extremely vulnerable to fluctuations in foreign interest.

Lin and Li (2002) provide an original model that accounts for both direct and indirect effects of products on GDP, as opposed to the previous model that only considered direct effects. The discovered evidence that the backhanded influence of products on development is nearly as large as the direct effect, implying that both domestic and foreign exchange are necessary for financial progress.

Although African countries have historically relied on trade with North America and Europe, they have consistently explored new markets, which signify a historic trade reorientation (Elmorsy, 2016). The trend has in recent times been directed towards China and India, with respect to both imports and exports. In 2015, China became a leading trade partner for sub-Saharan countries, accounting for 16.54% in imports and 13.99% in exports. Other than China, India accounted for 6.19%, the United States (5.38%), while Netherlands accounted for 4.22% of exports to the region in 2015. For imports, after China, India was leading by 5.56%, followed by Germany with 5.33%, and the United States with 4.22%.

Drummond and Liu (2013) noted that an increased investment in capital goods, alongside a high demand for inputs has prompted China's trade with countries in Sub-Saharan Africa.

## **2.5 Foreign Direct Investment's Influence on Economic Growth**

Attracting foreign investors is a core aim for policymakers all over the world, especially in underdeveloped nations where a shortage of cash is one of the most significant barriers to economic progress. Agriculture countries getting inward FDI are one of the things states are most excited about because they create a lot of high-paying jobs for people who usually get their jobs there. Wages are significantly higher than those paid by domestic businesses. When resources for attracting foreign direct investment are limited, it is vital for a potential host country to choose firms that are more likely to deliver the largest job growth (Coniglio et al., 2015).

Over the last two decades, FDI has increased dramatically. FDI has become a significant source of private external funds for many developing countries. Given the potential benefits of FDI to economic growth and development, a number of countries began to take steps to encourage it (Michaowski, 2012).

The economies of Sub-Saharan Africa are plagued by a variety of flaws that provide significant barriers to growth and poverty alleviation. One of the most serious issues is a lack of diversification in production, exports, and budget income. The region's economy is far more dependent on primary commodities than the rest of the world.

Despite growing proportions of services, industry, and manufacturing in the region's GDP, many countries still have a lot of people working in traditional agriculture. Sub-Saharan African countries rely significantly on hydrocarbons, minerals, and metals in addition to agricultural goods (World Bank, 2012).

To provide a solid foundation for policymaking, comprehensive observational studies of the effect of FDI on GDP are necessary. This study also adds to our understanding of the relationship between FDI and economic growth by offering a cross-country perspective on one of the Sub-Saharan African countries.

For a long time, non-industrialized countries have seen foreign direct investment as a crucial source of growth. Numerous academics have claimed that FDI flows resolve conflicts between organized ventures and privately activated investment funds, subsidize charge pay, generate business, and enhance the board and work skills in developed nations (Todaro and Smith, 2003; Hayami, 2001). Furthermore, by increasing trade as a result of greater domestic production capacity and competitiveness, FDI stops the cycle of underdevelopment and preserves the current state of installment equilibrium (UNCTAD, 1999). And Hayami (Hayami, 2001).

According to (Borensztein et al, 1997) FDI affects economic growth in developing nations through a variety of methods. Technology diffusion from industrialized to poor nations is the most important avenue. These diffusions have been discovered to occur through the importation of high-tech items, the acceptance of foreign technology, the acquisition of human capital in different ways, and multinational firms' R&D (Borensztein et al., 1997). As a result, the rate of growth in developing nations is a 'catch-up' process including the adoption and implementation of new technologies (Mwilima, 2003).

Most African governments have employed a number of strategies to keep their economies desirable to FDI. This has been accomplished by liberalizing the economy, giving fiscal incentives, removing barriers to foreign investment, and encouraging profit repatriation (Graham and Spaulding, 2004). Furthermore, African countries have restored and sustained macroeconomic stability through depreciating overvalued currencies, decreasing inflation, and reducing fiscal deficits.. They have set up subsidiary with multilateral organizations like the global relationship of venture advancement offices, among others, to boost investor confidence. Some of these agencies are widely respected as successful agencies that use state-of-the-art practices in all areas of promotion.

Because of the COVID-19 epidemic, real GDP growth in Uganda was just 2.9% in FY20, compared to 6.8% in FY19. In FY21, the GDP is predicted to expand at a similar rate. Due to a four-month internal lockdown, border closures for all but necessary goods, and the ripple effects of interruptions to global demand and supply networks, the economy slowed down in the last quarter of FY20. Consequently, state investment shrank sharply and

private spending slowed down. This affected the industrial and service sectors particularly severely, especially the informal service sector. According to Trading Economics global macro models and analysts' estimates, Uganda's GDP will reach 32.50 USD billion by the end of 2021. Uganda's GDP is expected to average approximately 34.00 USD Billion in 2022. Uganda's GDP was 37.37 billion US dollars in 2020, according to World Bank data. Uganda's GDP value is equivalent to 0.03 percent of the global economy. (Uganda commerce, 2021).

As a result of COVID-19, Uganda's medium-term future has taken a sharp turn for the worst. If the worldwide effect of COVID-19 is continued or the virus spreads more broadly in Uganda, Uganda's export recovery might be derailed; a comeback in FDI, tourism, and remittances could be severely affected; and productivity and internal economic growth could be further lowered. To put it another way, this might have far-reaching consequences for the economy, society, and the environment (World Bank,2020).

The telecommunications, financial services, and construction industries led growth, while the service and agricultural, forestry, fishing, and hunting sectors grew at a slower pace, accounting for 54.4 percent and 24.8 percent of GDP, respectively. The rise of mobile phone usage aided telecoms growth, while new commercial banks and microfinance institutions were licensed, as well as the size and reach of existing financial institutions, the financial industry grew. Lower prices for commodities like coffee and cotton offset the rise in food output, resulting in agricultural stagnation. A lack of commercialization, low productivity, and low value addition all play a role in the agriculture sector's shrinking share of the GDP over the last few years. On the demand side, private consumption and investment growth, but at lower rates growth. Private consumption and investment are expected to rise at a slower pace.

Private sector investment in Uganda grew in 2018 over the previous year. Due to increased debt-related inflows from both affiliates and non-affiliates, FDI grew significantly. Infrastructure projects, including motorways, power production plants, and oil refineries and pipelines are all projected to benefit from the increased government spending. Foreign direct investment (FDI) into Uganda would reach US\$1.266 billion in 2019, an increase of

US\$1.055 billion over the US\$1.005 billion registered in 2018. The mining, real estate, construction, financial & insurance services, and manufacturing industries all contributed significantly to overall FDI inflows. (UBOS, 2018).

Uganda's government and authorities have made it clear that they welcome foreign direct investment, and the country's free market economy, flexible financial system, and consumer market of more than 40 million people all appeal to investors. However, the business climate is difficult due to widespread corruption, a poor rule of law, and an increasingly aggressive Uganda Revenue Authority. Uganda has a free-trade and foreign-exchange policy. In FY 2018/2019, the production and engineering sub-sectors accounted for an astonishing 80 percent rise in foreign direct investment, bringing the total to USD 1.75 billion. Uganda's electricity, agriculture, construction, infrastructure, technology, and healthcare industries provide significant commercial and investment potential. Foreigners, with the exception of land, have the right to own property, start enterprises, and invest. Ugandan legislation allows foreign investors to buy indigenous businesses and invest in greenfield projects. The Firms Act of 2010 allows companies formed outside of Uganda to register (Reports, 2020).

According to the BOU report (2010), Financial services saw an increase in FDI inflows, partly due to benefits arising in the banking sector as a result of the country's largest commercial bank's private enterprise and the strategic capital appreciation of some global banks looking to acquire retail banking in developing markets with primarily long-term interests. Other sources of financial service industry growth have mostly come from higher retained earnings in the majority of big foreign-owned banks, which have been utilized to improve services by developing new products. The liberalization drive has led in the sale of businesses providing a range of services such as airport handling, hotels, and telephones, attracting a significant amount of FDI into Uganda's service sector.

### **2.5.1 The Empirical Evidence**

De Mello (1997) demonstrated that FDI leads to growth when there are efficiency spillovers to domestic enterprises. He has also realized the importance of the sectors. Using

cross-country data from 1981 to 1999, Alfaro (2003) found that total FDI had an inconclusive impact on growth. Foreign direct investment in the primary sector has a negative effect on growth, but manufacturing investment has a positive effect. The evidence from the service sector is inconclusive.

Borensztein et al. (1998), they examined the impact of FDI on economic development in a cross-country regression framework, the study was 69 countries and the range of data is about from 1970 to 1989. They observed that FDI is a critical driver of new technology adoption, resulting in faster growth than domestic investment. Furthermore, economic growth may be accomplished through an interaction between FDI and the host country's level of human capital. They do, however, add a caution to their findings, stating that the higher productivity of FDI is only true if the host country has a certain level of human capital.

To examine the link between FDI and economic development, Li et al. (2005) employed both Methodologies for single- and multiple-equation systems. From 1970 to 1999, they studied the influence of foreign direct investment (FDI) on economic growth by looking at data from 84 nations. They found that the impact of FDI on economic growth was favorable in rising countries, but negative in developed ones. Studying the association between FDI and economic development in 18 Latin American nations from 1970 to 1999, Bengoa et al. (2003) employed panel data. Host nations benefit from FDI, according to these researchers. Bengoa et al. (2003) discovered that the host country's advantage needs appropriate human resources, political, and monetary stability in a previous study. Furthermore, a number of business experts have emphasized the unpredictability of FDI and the resulting economic development. (Alfaro et al., 2004) and (Durham 2004).

## **2.6 Inflation rate and Economics growth**

A rise in the cost of goods and services is known as inflation in economics because of the inability to acquire money. A currency's purchasing power has decreased as a result of an increase in the overall level of prices, which is frequently stated as a percentage. Therefore, inflation signifies a drop in the buying power of money per unit as well as a loss of real

value in the economy's medium of exchange and unit of account. The expansion rate is a huge sign of value expansion since it is the annualized rate change in an overall value record, by and large the customer value list, over the long run. (Paul H, 1973).

According to Mankiw (2002). The impacts of inflation on an economy can be both good and bad at the same time. Inflation has a number of bad effects, including an increase in the risk of holding cash, which can make it difficult to invest and speculate, and, if the inflation is fast enough, a shortage of goods because people are holding on to cash because they expect prices to rise in the future. One of the advantageous ramifications is the limit of national banks to change genuine financing costs to diminish downturns, just as empowering interest in non-money related capital tasks.

According to economists, high rates of inflation and hyperinflation are caused by an excessive increase of the money supply. According to Robert Barro and Vittorio Grilli (1994), a rise in the money supply does not always lead to an increase in prices. Some economists say that when there is a "liquidity trap," putting in a lot of money is like "pulling on a thread."

Makin (2010). It is more difficult to reconcile differing viewpoints on the variables that lead to low to moderate inflation rates. It is possible to explain low or moderate inflation to changes in real demand for goods and services, changes in the velocity of money supply measures, particularly the Money Zero Maturity supply velocity, and changes in the quantity of money in circulation. Oliver Hossfeld (2010). Long periods of persistent inflation, according to conventional knowledge, are generated by the money supply expanding faster than economic expansion, and this is supported by historical evidence.

One of the macroeconomic issues is figuring out how growth and inflation interact. The question of whether inflation has an impact on growth has been debated extensively in the economic literature. With respect to the stage of growth of the global economy, the topic of these conversations has shifted. Keynesian policies were on the agenda after WWII in both rich and emerging nations, and as a result of these policies, aggregate demand increased, causing inflation and production to grow. Inflation was not seen as a concern at this time,

and the concept that inflation had a beneficial influence on GDP was on the board. While high inflation persisted in most nations during the 1970s, the idea that high inflation equaled great growth was challenged by dropping growth rates. In the 1980s, hyperinflationary difficulties, particularly in Latin American countries, intensified economic instability and harmed the growth of such countries. These outcomes support the theory that inflation has a detrimental impact on growth (Developments, 1999).

The adverse effects of inflation have been studied in terms of economic growth models in which capital accumulation and technological improvement result in a steady rise in per capita income. Uncertainty has been highlighted as a result of high and variable unforeseen inflation as a significant factor affecting the rate of return on capital and investment (Bruno (1993), Pindyck and Solimano) (1993). Given the fact that the majority of developed nations' tax regimes are not neutral (Jones and Manuelli (1993), Feldstein), even well forecasted inflation may reduce the rate of return on capital. Additionally, excessive inflation reduces investors' confidence in the future direction of monetary policy. When inflation has an effect on growth, it has an effect on the accumulation of other growth drivers such as human capital or research and development spending. This is referred to as inflation's accumulation or investment impact on growth.

Inflation, in addition to these consequences, causes chaos on market countries' long-term macroeconomic performance by lowering total factor productivity. This channel, also known as the efficiency channel, is more difficult to formulate in a theoretical model, but its relevance in the inflation-to-lower-growth transmission mechanism cannot be overstated. A high amount of inflation causes frequent price changes, which may be expensive to businesses and diminishes individuals' ideal cash holdings. It also makes it more difficult to predict what will happen because prices don't show how much information. This makes people spend more time and money getting information and making predictions defending themselves against price instability-related harms, putting the effective allocation of resources at risk. Although some theoretical models examine the efficiency channel's components in more depth, it is difficult to distinguish between them in aggregate empirical growth equations.

Histories have shown that the relationship between inflation and economic growth is essentially linear in principle; Mundell (1965) and Tobin (1965) argue for the existence of a positive relationship, whereas Stockman (1981) and Fischer (1983) argue in favor of the existence of a negative relationship. As opposed to this view, Fischer (1993) contends that there is a non-linear relationship between inflation and growth, with a positive relationship when inflation is below a particular level and a negative correlation when inflation is over that level. A little amount of research has been done on the nonlinear link between inflation and the rate of economic growth. A study conducted by Choi et al. (1996), who used the "adverse selection process" of the credit market, demonstrated that inflation has a favorable impact on growth until it crosses a certain threshold level. A financial market, in their opinion, comprises of borrowers and lenders, and the financial system's responsibility is to transmit money from lenders to borrowers. Lenders get deterred when inflation grows since the actual rate of return on assets diminishes, hence reducing the amount of money available for lending, according to the argument. Increasing inflation, on the other hand, motivates borrowers, resulting in an increase in the number of persons seeking credit, including new borrowers who are just taking advantage of the circumstances and therefore have a larger chance of defaulting on their loans. As a result, financial institutions face an adverse selection problem known as credit market rationing, in which banks refuse to extend credit to new borrowers with higher default rates, resulting in fewer loans being issued. As a result, rising inflation leads to slower economic development. However, Choi et al. (1996) think that when inflation is low, the Mundell-Tobin effect will happen, which will lead to a better selection process. This will lead to more economic growth. In the end, Choi et al. (1996) show that low levels of inflation help growth, but high levels of inflation make it hard for businesses to get loans.

According to Ozturk and Karagoz (2012), who used the ARDL approach and the cointegration test to assess the influence of inflation on financial development in Turkey from 1971 to 2009, the results showed that inflation had a negative impact on financial development. Aboutorabi (2012) investigated the influence of inflation on bank sector performance in Iran from 1973 to 2007, using a multilateral index and the ARDL technique, and found that inflation had a negative impact on the Iranian financial industry. Odhiambo

(2012) used yearly data from 1980 to 2011 to study the influence of inflation on financial development in Ghana, adopting a multi variable model and estimating it with the ARDL technique. The results revealed a negative link between inflation and financial development.

## **2.7 Empirical Study of International Trade and Economic Growth**

Zahonogo (2016) says that how simple or how much trade there is has a big impact on how the money works out. The study looked at the link between trade openness and economic growth in sub-Saharan Africa by looking at data from 42 SSA countries from 1980 to 2012. The results show that making trade easier can help the economy grow for a long time.

Despite the many advantages of trade flows, international trade does not have a completely beneficial impact on Uganda's economic development. Thus these benefits cannot be directly translated into economic growth due to various macroeconomic policy falsehoods resulting from international trade of which seems to be turning the country into an import dependent economy due to the increased rise in import from US\$27 million in 2014 to US\$ 28 million in 2015.

Another study from Adeleye (2015) says that overall trade has a big impact on the economy and is also important for wealth developments. According to his findings, global trade has positive and significant economic effects. In addition, the another study by El Khoury (2006) found the same thing: that trade openness and economic growth have a positive and basic relationship with GDP growth. There is a strong connection between the amount of trade a country does and how well its economy does over time.

According to Atoyebi et al. (2010), there is a positive relationship between international trade and economic growth, as both the volume and structure of international trade, which promotes high-technology exports, benefit the economy.

Imports are one facet of international commerce can effect on economic growth that is often overlooked. Ramos (2001). Arguments that ignoring import might lead to erroneous findings. Importation, particularly of capital goods, supports the exchange of innovation and supports the quest for new items and creation processes, which cultivate usefulness,

seriousness, and advance a quicker make up for lost time from the most un-created economies to the pioneers, as indicated by Humpage (2000), and Afonso (2001).

Imports also increase employment, both directly and indirectly, as well as local competitiveness, which can lead to a reduction in the use of critical production inputs (Shirazi & Manap 2005). Many studies have demonstrated that trade openness has a beneficial influence on economic growth (Ulaşan, 2012), contradicting the idea that trade and economic growth are linked. The contradictory findings in the empirical literature can be attributed to econometric technique, the sample of countries analyzed, and the indicator used as a proxy for trade openness.

Zahool et al. (2012), using the OLS approach, investigated the link between international trade and economic growth; their findings reveal that as a result of international trade, raw material imports, production, employment, and output all rise. As a result, they came to the conclusion that international trade takes place and plays a critical role in a country's economic progress.

Giaruzazmi (2011) investigated the effects of trade liberalization on the economic performance. His findings suggest that, while the effect varies by country, trade liberalization has enhanced nations' GDP per capita in the medium term on average, but the ratio of exports, imports, and trade over GDP has not changed as a result of trade liberalization.

Shreesh and Kishore (2012) used the Solow's model to investigate the influence of foreign liberalization on the Indian economy. Their findings show that higher international commerce and economic openness enhanced total production, resulting in quicker economic development.

Nidugala (1990) also conducted an empirical study on the influence of exports on economic growth in India from 1960 to 1989. According to the findings, the increase of manufactured exports has a considerable positive link with GDP growth, but the growth of primary exports has little impact on GDP growth. He attributed this shift in the link between export

growth and GDP growth to two factors: greater levels of development and a shift in the mix of exports in favor of manufactured exports.

According to Hatemi and Irandoust (2002). Discovered the causal link between export growth and economic growth. The findings reveal unidirectional Granger causation going from economic growth to export growth in Denmark, and bidirectional causality running from economic growth to export growth in Finland, Norway, and Sweden. They also investigated the relationship between export growth and economic growth in Japan by utilizing the bootstrap simulation approach to perform augmented Granger-causality tests. The findings indicate that the Granger-causality is bidirectional, implying that export growth is an important component of Japan's economic development. They do, however, suggest a link between international commerce and exports and economic development.

Carolinea, Ireen, & Cleopas, (2014). The effect that export diversification has on the growth of the economy. To find out how export diversification and other factors that affect it affect economic growth, the study looked at time series data from 1980 to 2010. It used a Vector Error Correction Model to do this. There are a lot of things that could affect export diversification, like how much money is made, how much money is made by people, how much money is made by the real effective exchange rate, and how open the country is to trade. People who did the study say that export diversification and trade openness are good for the economy in the long run. But the real effective exchange rate, capital creation, and human capital have bad long-term effects on the economy, they said. The research says that the South African government should keep up with trade liberalization. The South African government should also help businesses come up with new ideas and new products by giving them money and encouraging them to think outside the box.

Using yearly data from 1980 to 2013, Charles Tetteh (2015). looked at the influence of exports on Ghana's economic development. The study aims to investigate long-run and short-run correlations between exports and gross domestic product using time series econometric approaches such as cointegration and vector error correction estimates. In Ghana, the Johansen cointegration test indicated that real GDP, exports, gross capital formation, and labor had long-run correlations. Using the Granger causality test, there was

also evidence of bi-directional causation between exports and GDP growth. Real exports and gross capital creation have favorable effects on real GDP in both the short and long run, according to the study. In the long run, labor had a negative impact on GDP, but it had a favorable impact on real GDP growth in the previous year in the short run.

Martins Priede (2012) Investigates the impact of growing import competition from both EU and non-EU nations on European regional GDP per capita during a ten-year period, from 1995 to 2005. The results demonstrate a positive influence of those two elements on regional GDP per capita, which does not support import substitution, but might be as a result of complementary or intra-firm trade.

### 3. RESEARCH METHODOLOGY

#### 3.1 Model Specification

In carrying out the linear combination of the variables (FDI, inflation, Trade, Import, and Export) and GDP in the model, an alternate method will be used for this research. This method, which is referred as Stock-Watson technique, clearly has a greater benefit over both the single equation and Johansen maximum likelihood procedures. By incorporating leads and lags of initial differences of the regressors, this technique improves on others by accounting for repressor endogeneity and serial correlation, which is a significant critique of the single equation method and the Johansen maximum likelihood procedure. In addition, the Stock-Watson technique, like the Johansen process, exhibits asymptotic optimality characteristics as a function of time. This is stated in the following way:

$$GDP = \beta_0 + \beta_1 FDI + \beta_2 TRD + \beta_3 INF + \beta_4 IMP + \beta_5 EXP + e$$

Where

GDP= Real GDP

$\beta_1, \beta_2, \beta_3, \beta_4$  and  $\beta_5$ = Coefficients of independent variables (FDI, TRD, INF, IMP and EXP)

FDI= Foreign direct investment

TRD = Trade

INF= Inflation

IMP = Import

EXP = Export

e= Error term.

The ARDL approach consists of two steps. Equation (1) is rearranged as an unconstrained error correction model (ECM) in the ARDL framework as equation (2) to test for the presence of long-term cointegration.

$$\Delta GDP_t = C_0 + \alpha_1 GDP_{t-1} + \alpha_2 FDI_{t-1} + \alpha_3 TRD_{t-1} + \alpha_4 INF_{t-1} + \alpha_5 IMP_{t-1} + \alpha_6 EXP_{t-1} + \sum_{i=1}^n \alpha_1 \Delta GDP_{t-1} + \sum_{i=1}^n \alpha_2 \Delta FDI_{t-1} + \sum_{i=1}^n \alpha_3 \Delta TRD_{t-1} + \sum_{i=1}^n \alpha_4 \Delta INF_{t-1} + \sum_{i=1}^n \alpha_5 \Delta IMP_{t-1} + \sum_{i=1}^n \alpha_6 \Delta EXP_{t-1} + \varepsilon_i \dots\dots\dots (2)$$

ARDL in the short-term dynamics are represented by the delta. The associated parameters compute long-term associations as well as variables. The short-run error correction model is used to assess short-run dynamics as well as to confirm the long-run coefficient of equation robustness (2). It's written as follows in equation (3)

$$\Delta GDP_t = C_0 \sum_{i=1}^n \alpha_1 \Delta GDP_t + C_0 \sum_{i=1}^n \alpha_2 \Delta FDI_{t-1} + \sum_{i=1}^n \alpha_3 \Delta TRD_{t-1} + \sum_{i=1}^n \alpha_4 \Delta INF_{t-1} + \sum_{i=1}^n \alpha_5 \Delta IMP_{t-1} + \sum_{i=1}^n \alpha_6 \Delta EXP_{t-1} + \varepsilon_i \dots\dots\dots (3)$$

**Tests for Heteroskedastic Error:** The analysis also looks at whether or not the data has an issue with heteroskedasticity. The hull hypothesis was investigated and proved in the following way.

$$H_1: \sigma_1^2 = \sigma_2^2 = 0 \dots\dots \sigma_k^2 = 0$$

$H_1$  : At least one of these is different from zero

As a result, if the test was found rejects of the null hypothesis, the analysis then indicates that the model has a heteroskedasticity issue.

### 3.2 Data Collection

We use secondary data as source of the data analysis to gather relevant information for this study. Data on FDI, trade, inflation, import, export, and GDP for Uganda are collected between 1988 and 2019. The data will be derived from World Bank data indicators. The researcher will also utilize E-views 10 software to analyze data since our data is based on time series and the model requires that program.

### 3.3 Descriptive statistics

The descriptive analysis method was utilized to illustrate or summarize data in a meaningful manner in this investigation. Descriptive statistics are significant because they demonstrate how the Jarque-Bera Tests performed in regard to our data. Descriptive

statistics also illustrate how the Jarque-Bera Tests performed in relation to our data. A properly distributed data set has skewness and kurtosis values of zero, indicating that the data set is normal. This finding serves as the foundation for a simple test of normal known as the Jarque-Barre Test. In addition, this test allows us to draw conclusions that go beyond the facts we have evaluated and to reach judgments about a hypothesis we have proposed.

### **3.4 Unit roots test**

Unit root examination will be utilized to an autoregressive model to see whether it has any unit roots. The research used a variety of unit root methods to determine if the data were stationary or non-stationary. First, this research used the Phillip Person technique (PP) and the Augmented Dickey-Fuller (ADF) by examining whether or not the null hypothesis was rejected. The existence of a unit root is commonly characterized as the null hypothesis, while the alternative hypothesis is either stationarity, trend stationarity, or explosive root, depending on the test performed. This exploration will utilize the stationarity investigation to see whether the mean and change of the stochastic part is steady over the long run.

### **3.5 Correlation matrix**

The correlation analysis was employed in this research to determine whether or not a link existed between the variables under consideration, as well as the significance of the association. Due to the fact that the correlation matrix is based on the coefficient of correlation, if two variables have a perfect positive linear relationship (a sum of 0 and 1.0), the correlation will be one hundred percent (1.0.0.0) because the correlation matrix is centered on the coefficient of correlation, which is a sum of 0 and one hundred percent (1.0.0.0). It is implied by the correlation coefficient of zero that if there is an absolutely perfect negative linear connection between the two variables, there is no linear relationship between the variables.

**Testing the Normality of Data:** As the sample size grows large, consistency is a trait of the point estimator that collapses around the parameter, essentially telling us nothing about the shape of the sample size. The results of the study need a way of approximating the distribution of the estimators. The hypothesis of the study

$H_0$  Data is not normally distributed

$H_0$  Data is normally distributed

If the null hypothesis is not discarded, this means that the data used in this hypothesis is not usually distributed and that the possibility of heteroskedastic error exists.

**Testing the Existence of the Autocorrelation:** Autocorrelation is the association of a time series with its own past and future values. Autocorrelation is also often referred to as "lagged correlation" or "serial correlation," referring to the correlation of a sequence of numbers arranged in time between members. To test the existence of the autocorrelation following hypothesis is developed

$H_0: P = 0$

$H_1: P \neq 0$

If the study rejects the hypothesis, then the study concludes that model problem of autocorrelation.

## 4. RESEARCH FINDINGS

### 4.1 Descriptive Statistics

Table presents the descriptive statistics show that the average, minimum, stander diversion and maximum.

**Table 1. descriptive analysis**

	GDP	FDI	TRADE	INF	IMP	EXP
Mean	611.9414	4.56E+08	11.79025	20.84427	3.66E+09	2.21E+09
Median	580.2023	2.53E+08	12.16703	6.000944	1.91E+09	9.83E+08
Maximum	898.4075	1.27E+09	16.96271	189.9751	9.54E+09	6.12E+09
Minimum	353.1027	-5910000.	3.613496	-3.169556	6.19E+08	1.78E+08
Std. Dev.	183.2579	4.13E+08	3.140080	39.88800	2.95E+09	2.02E+09
Skewness	0.110343	0.512650	-1.121055	3.025923	0.578028	0.593868
Kurtosis	1.539978	1.833738	4.011261	12.06910	1.717415	1.718562
Jarque-Bera	2.907155	3.215207	8.066273	158.4979	3.975321	4.070396
Probability	0.233733	0.200367	0.017719	0.000000	0.137016	0.130655
Sum	19582.12	1.46E+10	377.2882	667.0166	1.17E+11	7.06E+10
Sum Sq. Dev.	1041087.	5.30E+18	305.6632	49322.64	2.70E+20	1.27E+20
Observations	32	32	32	32	32	32

**Source:** Author's analysis using data from World Bank data indicators

The table 1 above shows the descriptive statistics of the variables. The result reveals that average GDP over the study period was found to be 611.9 (SD=183.2) which span between 353 to 898. The average value of FDI is 4.56E+08 with (SD= 4.13) and the series between -5910 to 1.27. The average value of trade is 11.79 (SD=3.14) and it ranges between 3.61 to 16.96. The value of mean for INF is 20.8 with (SD= 39.8), and the ranges between -3.169 to 189. The value of average for exports and imports was obtained to be 3.66E+09 (SD=2.95) and 2.21 (SD=2.02) respectively. All skewness of the data are shows positive results except trade show negative skew and less than with value 3, that means it consider that data are normally skew with left side. The positive skewness scores suggest data that is correctly skewed. The right tail is longer than the left tail, thus it's skewed right. Because

the skewness for a normal distribution is zero, or any symmetric data should have a skewness approaching zero, we consider the data to be normal.

#### 4.2 Testing Correlations

Correlation matrix examines the direction of the relationship among variables also indicates the multicollinearity problem. Table 4.2 shows the pair matrix for the variables used in the empirical analysis.

**Table 2. Correlation matrix**

	GDP	FDI	TRADE	INF	IMP	EXP
GDP	1					
	-----					
FDI	0.938668	1				
	0.0000	-----				
TRADE	0.665053	0.663400	1			
	0.0000	0.0000	-----			
INF	-0.419840	-0.319062	-0.755902	1		
	0.0167	0.0751	0.0000	-----		
IMP	0.958769	0.952896	0.616665	-0.307625	1	
	0.0000	0.0000	0.0002	0.0868	-----	
EXP	0.962282	0.946931	0.599182	-0.300306	0.994243	1
	0.0000	0.0000	0.0003	0.0949	0.0000	-----

**Source:** Author's analysis using data from World Bank data indicators

The table 2 shows the result of correlation analysis reveals that there is a negative relationship between GDP and inflation with the value of (-0.419), and statistically significant because the p-value is less than level of significant, while GDP have highest positive coefficient correlation to other variables of the study. The GDP has positive relationship with FDI (0.938) as well as exports 0.962 and imports 0.958 respectively which is strong coefficient degree. Also trade have strong negative coefficient correlation with inflation (-0.755). Trade have also strong positive correlation with export and imports,

correspondingly 0.616 and 0.599, also INF have negative correlation with exports and imports value of (-0.307) and (-0.300), and statistically significant.

### 4.3 Cointegration Test

A co-integration test is performed to analyze the existence of the variables in the study have a long-run equilibrium. The study applied trace and maximum eigenvalue tests, the assumption of trend and intercept were considered for all the variables.

**Table 3. Cointegration test**

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.932886	175.6331	107.3466	0.0000
At most 1 *	0.731482	94.59200	79.34145	0.0023
At most 2	0.645075	55.14686	55.24578	0.0510
At most 3	0.402749	24.07136	35.01090	0.4401
At most 4	0.222354	8.608827	18.39771	0.6202
At most 5	0.034856	1.064325	3.841466	0.3022

**Source:** Author's analysis using data from World Bank data indicators

The Johansen co-integration test verified that there is a cointegration link between variables at a 10% significance level, implying that GDP has a substantial influence in the long term. At the 5% significance level, the findings show that there is no cointegrating equation exists, trace test indicates 2 cointegration at the 0.05 level denotes rejection of the Ho at the 0.05 level.

### 4.4 Unit Root Test

To test the data stationary is checked through Phillips-Perron and Augmented Dickey-Fuller tests are applied to trend and intercept. The Null Hypothesis for PP and ADF is that the series is non-stationary, while the series is stationary in the alternative hypothesis.

**Table 4. Unit Root Test**

Philips-Perron							
Variable s	Levels		1 <sup>st</sup> Difference		2 <sup>nd</sup> Difference		Conclusi on
	t-statistics	Prob. *	t-statistics	Prob. *	t-statistics	Prob. *	
<b>GDP</b>	0.268848	0.9727	-4.028024	0.0041	-10.48937	0.0000	I(1)
<b>FDI</b>	0.324983	0.9759	-4.692469	0.0007	-15.65073	0.0000	I(1)
<b>TRD</b>	-4.177490	0.0027	-5.585801	0.0001	-19.95259	0.0001	I(0)
<b>INF</b>	-9.309153	0.0000	-6.786784	0.0000	-13.95107	0.0000	I(0)
<b>IMP</b>	0.761669	0.9916	-3.434131	0.0175	-6.499803	0.0000	I(1)
<b>EXP</b>	1.267449	0.9979	-2.642870	0.0959	-11.37873	0.0000	I(1)
Augmented Dickey- Fuller							
<b>GDP</b>	0.445790	0.9818	-4.052926	0.0039	-6.074572	0.0000	I(1)
<b>FDI</b>	-0.303611	0.9133	-5.492902	0.0001	-5.249523	0.0003	I(1)
<b>TRD</b>	-2.919637	0.0545	-5.182602	0.0002	-6.105975	0.0000	I(0)
<b>INF</b>	-6.607415	0.0000	-6.265133	0.0000	-6.709781	0.0000	I(0)
<b>IMP</b>	2.364510	0.9999	-3.382756	0.0197	-2.658594	0.0952	I(1)
<b>EXP</b>	0.645876	0.9887	-2.729073	0.0810	-5.256939	0.0002	I(1)

Source: Author's analysis using data from the World Bank data indicators

Note: \*, \*\* and \*\*\* indicate statistically significant level at 1%, 5% and 10%, respectfully or a rejection of the null hypothesis of a unit root.

The table above show the results of unit root test with two techniques, ADF and PP test indicate that GDP is integrated at level series with 10% significant level, which means ADF and PP tests are non-stationary at level series, so null hypotheses were fail to rejected at level, but when it comes to the first difference and second demonstrated that GPD is integrated zero which means ADF and PP tests are stationary.

The table also show the results of trade and inflation that they are integrated at all level with 1% level of significant, which means in ADF and PP tests, the data are stationary, so we can reject the null hypothesis.

Also the table show the result of other variables of the study at level series with 10% significant level are non-stationary when it comes to ADF and PP tests of the study. So that fail to reject the null hypothesis. ARDL is the right methodology for studying cointegration among variables since the order of integration of the variable is a mixture of I(0) and I(1).

#### 4.5 Estimation of ARDL Long-Run and Short-Run Coefficient

In the ARDL test, a regression equation is utilized to predict short-term and long-term effects using time series data. Cointegration was used in this study to test if elements that have been in coherence for a long time were present. The underlying break was (ARDL) by Pesaran et al. (2001), to introduced an ARDL cointegration testing framework. In addition to short-term and long-term influences, the specified result takes into account the link between these components.

Pesaran et al. (2001), who suggested using the ARDL approach for cointegration for a long-running relationship, whether the hidden elements are I(0), I(1), or a combination of both. In such instances, the ARDL is a technique that can provide useful and accurate assessments, and the ARDL approach used to distinguishing proof of the cointegrating vector. Overall, every of the fundamental components may be considered as a single long-term relationship condition. Because ARDL is a unique single model condition with an ECM-like architecture, re-parametrization is conceivable. Backslide work combines the regressor's unbounded leg in a scattered leg model.

**Table 5. ARDL model short-run**

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
GDP(-1)	0.968537	0.040394	23.97700	0.0000
FDI	1.78E-08	1.67E-08	1.064473	0.3005
FDI(-1)	-3.20E-08	1.43E-08	-2.240274	0.0372

FDI(-2)	7.41E-08	1.49E-08	4.981458	0.0001
TRADE	-1.504050	0.956347	-1.572703	0.1323
INF	-0.410572	0.120622	-3.403799	0.0030
IMP	2.36E-09	4.90E-09	0.481594	0.6356
IMP(-1)	7.89E-09	5.20E-09	1.517845	0.1455
IMP(-2)	-2.23E-08	4.16E-09	-5.357937	0.0000
EXP	7.04E-09	9.14E-09	0.770476	0.4505
C	55.81360	23.17230	2.408634	0.0263

Source: Author's analysis using data from the World Bank data indicators

The table above shows the findings of the ARDL model in the short term, indicating that there is a substantial relationship between GDP and other variables in the research. GDP (1) had a p-value of 0.0000, which was less than the significant value. As a result, there is reason to reject the null hypothesis. Also, FDI (1) and (2) was found that there is effect with economic growth in short-run because the results showed their p value is less than level of significant. So that means we can reject the null hypothesis.

The table also showed that trade has no effect in the short-run on the other variables of the study. Because the p value of was founded insignificant and we cannot reject the H0. The inflation has short-run effect on economic growth, because the results indicates that the p-value 0.0030 and statistically significant.

The imports (-1) revealed that there is no short-run impact since the p-value is 0.145, implying that we cannot reject H0. However, the imports (-2) p-value was observed 0.0000, indicating that there is evidence to reject the null hypothesis. We may conclude that imports have a significant influence in the short run when it comes to log (2). Furthermore, exports were shown to have no effects a short-run on economic growth since the p-value of this data is 0.4505, which is greater than the significant level, indicating that we cannot reject H0.

**Table 6. ARDL long-run**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
----------	-------------	------------	-------------	-------

C	55.81360	23.17230	2.408634	0.0263
GDP(-1)*	-0.031463	0.040394	-0.778889	0.4456
FDI(-1)	5.99E-08	2.05E-08	2.918054	0.0088
TRADE**	-1.504050	0.956347	-1.572703	0.1323
INF**	-0.410572	0.120622	-3.403799	0.0030
IMP(-1)	-1.21E-08	6.34E-09	-1.902803	0.0723
EXP**	7.04E-09	9.14E-09	0.770476	0.4505
D(FDI)	1.78E-08	1.67E-08	1.064473	0.3005
D(FDI(-1))	-7.41E-08	1.49E-08	-4.981458	0.0001
D(IMP)	2.36E-09	4.90E-09	0.481594	0.6356
D(IMP(-1))	2.23E-08	4.16E-09	5.357937	0.0000

Source: Author's analysis using data from the World Bank data indicators

The table above shows the results of ARDL in the long-run and the findings indicates that GDP (-1) has no effect in the long-run with other variables of the study because the P value was found 0.4456, so that means we fail to reject the H0. Also the results indicate that FDI (-1) has effect with economic growth in the long-run because p-value was found 0.0088, and also table show that D(FDI(-1)) has long-run effect with other variables of the study and the p-value was found 0.000, so we can reject the H0.

As it seen the table above trade have no effect in the long-run with other variables of the study, because the probability value was found 0.1323, so this means we have no evidence to reject the H0. Also there is long-run effect between inflation and other variables of this study, the P value was found 0.0030 and it's significant, so that means there is evidence to reject the null hypothesis. The results shows that there are long-run effect between imports (-1) and other variables of this study, and the p-value was found 0.0723, so we can reject the H0. The study also provide us that there is long-term effect in the D(IMP (-1)) between other variables of the study, and P-value with 0.0000, so we can reject the H0. Also, we have exports in the data that shows there is no effect in long-run and P-value was found 0.4505, and we cannot reject the H0.

#### **Table 7. F-Bounds Test**

F-Bounds Test

Null Hypothesis: No levels relationship

Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	14.04110	10%	2.08	3
K	5	5%	2.39	3.38
		2.5%	2.7	3.73
		1%	3.06	4.15
			Finite Sample: n=30	
Actual Sample Size	30			
		10%	2.407	3.517
		5%	2.91	4.193
		1%	4.134	5.761

As it is seen the table above shows F-Bounds Test to determine ARDL short-run and the long-run relationship between the variables of the study. The table shows the null hypothesis has no level relationship and F value showed 14.04110, that means the F value is higher than the I/o bound, so we can reject the “H0” of no cointegration between the variables.

#### 4.6 ARDL Diagnostic tests

The study was tested for serial correlation using the Breusch-Godfrey Serial Correlation (LM) test, heteroskedasticity using the ARCH test and Ramsey test

**Table 8: ARDL Diagnostic tests**

ARDL Diagnostic tests		
Test	Null hypothesis	Prob.**
LM Test	No, Serial Correlation	<b>0.0842</b>
ARCH	No Heteroskedasticity	<b>0.3061</b>
Ramsey test	There is no a problem	<b>0.7296</b>

Source: Author’s analysis using data from the World Bank data indicators

Table above shows the ARDL diagnostic test, and the results show that there is no Heteroscedasticity problem with the data because p-value was found 0.3061. Since the

corresponding probability value is greater than 5% we cannot reject the null, which indicates that our variables are non-constant. The diagnostic check reveals that the model is free of heteroscedasticity and autocorrelation, implying that the two measures are reject at level of 5%. Furthermore, the normality and Ramsey test reveals that correct and that the distribution is normal.

#### 4.7 Granger Causality

The Granger causality test is a factual theory test used to decide whether one-time series is valuable in estimating another. It was created by Granger (1969). Often address "basic" relationships, but Granger argued that causality in financial elements may be shown by determining the capacity to anticipate future upsides of one-time series based on previous upsides of another time series. Economists guarantee that the Granger test only discovers "prescient causality" because the topic of "real causality" is very philosophical, and presuming that one event happening before another can be used to indicate causation.

A Granger Causality test was used to determine the direction of the variables in the research. The findings, which are presented, show a link between international trade and Uganda's economic growth.

**Table 9: Granger Causality**

Null Hypothesis:	Obs	F-Statistic	Prob.
FDI $\longrightarrow$ GDP	30	0.08405	0.9196
GDP $\longrightarrow$ FDI		7.51188	0.0028
TRADE $\longrightarrow$ GDP	30	0.13341	0.8757
GDP $\longrightarrow$ TRADE		0.88661	0.4246
INF $\longrightarrow$ GDP	30	0.67003	0.5206
GDP $\longrightarrow$ INF		0.46709	0.6322
IMP $\longrightarrow$ GDP	30	9.93077	0.0007
GDP $\longrightarrow$ IMP		3.41871	0.0487
EXP $\longrightarrow$ GDP	30	1.81651	0.1834
GDP $\longrightarrow$ EXP		3.30956	0.0531
TRADE $\longrightarrow$ FDI	30	2.94090	0.0713

FDI	→	TRADE		0.73845	0.4880
INF	→	FDI	30	5.73751	0.0089
FDI	→	INF		0.27107	0.7648
IMP	→	FDI	30	9.24430	0.0010
FDI	→	IMP		0.20560	0.8155
EXP	→	FDI	30	9.61060	0.0008
FDI	→	EXP		0.78055	0.4690
INF	→	TRADE	30	0.45035	0.6425
TRADE	→	INF		0.28770	0.7524
IMP	→	TRADE	30	0.68822	0.5117
TRADE	→	IMP		1.10655	0.3464
EXP	→	TRADE	30	0.75805	0.4790
TRADE	→	EXP		0.62691	0.5424
IMP	→	INF	30	1.06695	0.3592
INF	→	IMP		0.14016	0.8699
EXP	→	INF	30	0.61144	0.5505
INF	→	EXP		1.11435	0.3439
EXP	→	IMP	30	7.14688	0.0035
IMP	→	EXP		3.86594	0.0344

Source: Author's analysis using data from the World Bank data indicators

The table above showed the granger causality and the results indicates the FDI does not have cause to GDP but the GDP has cause FDI, so the link between these data are consider unidirectional relationship, that means one side have cause but the other side does not cause any relation. The results also indicate that the trade and inflation have no bidirectional or unidirectional relationship with GDP, this results were found by examining granger causality. The table show the imports have cause effect to GDP while the data provided that GDP does not cause imports, this results implies that imports have unidirectional relationship with GDP. When it comes the table above it seen that exports do not have cause GDP but results show that GDP have cause exports, so that means this relationship in unidirectional relationship.

The decision rule of test is 10% of level of significant, that implies, if the test p-value was found less than level of significant, that mean we can reject the null hypothesis. Otherwise we can the alternative hypothesis. Trade can cause FDI but FDI does not cause trade, inflation can cause FDI but FDI does not inflation. Imports does cause FDI but FDI does not cause imports. Exports can cause FDI but FDI not cause exports. Inflation and trade, they have no unidirectional or bidirectional relationship as well as imports and trade. also the results indicate exports and trade have no cause between them and also as well as imports and inflation have no cause between them, as well as exports and inflation. Last results of the table show that exports and import have bidirectional relationship between data series, this result was found under granger causality.

## 5. CONCLUSION AND DISCUSSION

The review was concluded that trade and exports have no effect on economic growth in Uganda when it comes to whether short-run or long-run because this result was found by utilizing the ARDL and also the trade data series was found stationary with at all the level by checking PP and ADF test and exports data series become stationary at first difference. The data analysis also was found that there is no causal relationship between trade and exports. GDP has a statistically significant effect on economic growth in the short run, FDI has an effect on economic growth in both the long and short runs, and they have a bidirectional relationship based on the Granger causality test, and Uganda's GDP has an effect on its exports, implying that exports have a bidirectional relationship with GDP.

Inflation has short- and long-term effects, according to the study, and inflation is negatively related to economic growth. Inflation and GDP have unidirectional connection, implying that inflation does not cause GDP, as well as that GDP does not have caused inflation.

Imports was found that there is long-run and short-run have on Uganda's economic growth, and there is significant effect between imports and economic growth. The results indicate that increasing imports can lead increasing GDP, this results was found by examined ARDL model The causality test for the import variable reveals that imports have bidirectional relationship with GDP. Johansen Cointegration test show that the variable data is cointegrated in the model. This results consistent other researchers Musinguzi, I., & Rapha, I. K. (2019). They found that there is a positive impact between imports and Uganda's economic growth.

According to data analysis, the study concludes the findings that trade and exports have effect on economic growth. Because the country seems that having problems with manufactured sector, that makes poor function of exports. There is similar results Subasat, T. (2002). That suggested exports have effects on economic growth, as well as (Bakari, et al, 2017), have same arguments in their study. This means that a higher level of economic activity is necessary for the economy to expand its exports, and that export expansion is also required for Uganda's output to rise. A more appropriate export promotion program

should be created to put the Ugandan economy on a path of higher growth. Strong government action is required to promote the growth of Uganda trade and also exports, not only to large scale of business, but also to ensure that the activities of these investors contribute positively to Uganda's development and Uganda's economic growth. Furthermore, the findings suggested that trade has no effect on the economy of Uganda because the production sector is too low and small businesses have no protection from large companies with large scales who have imported items from abroad, which makes people have no interest in producing something and coming to market to make a trade.

### **5.1 Limitation and further research**

This research contains a number of important drawbacks. The data of this study was not found to investigate the whole country of their economy factors. The paper has been considering some factors that makes effect of economic but it's not enough when it comes to measure the economy of the country. A preliminary investigation was conducted at the aggregate level of trade. Future studies might benefit from looking at the products traded and their impact on economic development. Trade's might be effects become positive impact on economic development may be better understood by conducting an in-depth investigation. It will show whether agricultural exports or non-agricultural imports are driving trade-driven growth in Uganda. It would be useful to integrate other important factors into the equations in which trade and capital are also impacted by other economic variables in this research.

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