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Determinants of Export Performance in Uganda (1989-2020)

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Abstract: The study is set to investigate the factors determining export performance in Uganda. The specific objectives of the study are to examine the relationship between Foreign Direct Investment net inflows, inflation, Real Exchange Rate and export performance from 1989 to 2020. The study adopted a longitudinal design and the analysis was based on stationarity tests, co-integration tests, ordinary least squares tests and finally diagnostic tests. The study results show that there is a significant relationship between foreign direct investments and export performance. Secondly, it was found that there was a relationship between inflation and export performance. The study also observed a significant relationship between inflation and export performance. Finally, it was found that the real exchange rate affects export performance. The study concludes that the development of foreign direct investments induces export performance; hence export performance can be generated through foreign direct investments. The study also concludes that the state of inflation reduction can be a general development of the export performance for the countries, while the real exchange rate is a key determinant for the export performance in Uganda from 1989 to 2020. The study recommends that there is a need for regulations and monitoring to ensure the proper form of foreign businesses in the country together with enhancing the management situation for the management of the business. Secondly, the policies intended to reduce inflation are needed to increase the capacity of businesses to operate and attain mechanisms for the reduction of inflation. Finally, the government should also embark on strong fiscal policy to reduce unnecessary money supply which can lead to inflation that negatively impacts on economy & reduces economic growth.

Keywords: *Export performance; Foreign Direct Investment net inflows; inflation; Real Exchange Rate; co-integration tests; Uganda.*

1. Introduction

Similar to many countries, Uganda's export performance varies according to discrepancies that occur in trade across the globe (Awolusi, 2021; Awolusi & Mbonigaba, 2020). For example, in February 2021, Uganda's exports increased by 11.5% to US $ 413.6 million from US$ 370.8 million recorded in January 2021. However, in March 2021 total exports decreased by 10.8 percent in January 2021 to US$ 370.8 million from $ 415.6 million recorded in December 2020 (UBOS, 2021). Uganda's current leading export commodities include gold, gold compound, coffee, fish and fish products, cocoa beans, maize and tea among others. The Uganda Bureau of Statistics monthly merchandise trade statistics bulletin (as of April 2021) indicated that the Middle East is the leading destination of Uganda's formal exports followed by the East African Community, the European Union, other Africa and Asia. According to Beleska-Spasova (2014), achieving effective Export Performance is at the core of the tactical legislative procedure for both businesses and other entities.

But also Safari & Saleh (2020) indicate that both internal and external forces influence the nature of the export performance of a given country. Therefore this study will look at determinants of export performance in Uganda from 1989 to 2019. Exports have been for decades regarded as a major source of foreign currency reserves and a significant driver of the economic growth of nations. Exports open up domestic industries to foreign markets thus improving the balance of payments position. The increase in potential market size can lead to increasing returns, economies of scale and increased capacity utilization. Exposure to world markets may also induce competitive pressures and may spur innovation and facilitate technological advancement and knowledge spillovers into the domestic economy, leading to efficiency gains in production and management practices. Exports also generate much-needed foreign exchange, which can be used to import superior capital goods and intermediate inputs that are critical to the domestic production of a country. Thus, an expansion of exports will have positive spillover effects on the rest of the economy (Angomoko, 2020).

In May 2019, the East African Community remained the major destination for Uganda's export followed by the Middle East, then the Rest of Africa. Exports to the EAC Partner States declined on an annual basis where whereas they increased on a monthly basis. Exports to the EAC fell from US$ 150.34 million in May 2018 to US$ 118.3 million in May 2019. Over the same period, exports to all EAC Partner States declined with Rwanda registering the biggest decline (Zahonongo, 2020). Uganda's dominant export product is and has for decades been coffee, but other goods and service exports have grown in importance. Whereas in the 1990s coffee exports were higher than all non-coffee exports combined, coffee's share of merchandise exports had shrunk to about 24% in 2013.1 Over the last decade, Uganda has begun to export significant amounts of fish, tobacco, tea, and cocoa, with shares of around 6% of merchandise exports each, depending on the year. While food commodities still make up the majority of the export basket, the share of non-food exports has grown, with a variety of non-food exports produced mainly by agri-business and light manufacturing industries (Kingori, 2021). This group of products includes cement, metal and steel, wood, chemicals, leather, and plastic products.

Overall it is much more fragmented and diversified within than the food-commodity group of exports. The biggest change in Uganda's export sector has come from the growth in services exports. In 1995, services made up about 15% of all exports, a value that has since risen to 42% (MoFPED, 2019). The fall in exports to Rwanda follows the closure of the Uganda-Rwanda border in recent months. In comparison with April 2019, exports to the EAC Partner States increased by 38.3% from US$85.53 million to US118.3 million in May 2019. This development is explained by an increase in exports to Kenya (MoFPED, 2019). Regardless of these forms, Uganda's merchandize trade deficit remained largely unchanged in February 2019 in comparison with the preceding month. The Merchandise trade deficit was USD 203.8 million in February 2019 compared to USD 203.6 million registered the previous month. Compared to February 2018, the merchandise trade deficit worsened by 9.3% from USD 186.5 million to USD 203.8 million in February 2019. This follows an increase in the import bill by 1.8% and a fall in exports by 2.7% (MoFPED, 2019). It is therefore considerably reasonable to identify the factors responsible for the low levels of exports and fluctuating export volumes as it is expected to facilitate the design of policies to curb the inconsistencies in Uganda's export sector. Exports represent a key aspect of the country's revenue systems; the export performance for Uganda is significant in the generation of the country's overall performance and productivity.

The system of production supports export performance which countries need to attain. The government of Uganda has attempted to promote the export sector through introducing various reforms in the economy such as liberalization of the export sector and establishment of various agencies to foster export growth by providing exporters with incentives and advice. However, the country has registered a reduction in the export base, with the trend being low. Since independence, coffee has been Uganda's leading export accounting for more than 50% of the total export earnings until, recently when it was over taken by non-traditional exports. Some of the traditional exports such as copper disappeared in 1997 and commodities like fish and maize, which previously were not among the traditional exports, emerged and presently constitute a significant proportion of total exports (Adeolu, 2007). According to the international trade Centre (2012), between 2007 and 2010, the value of Ugandan exports had increased by over 21%. Uganda is estimated to have exported nearly USD 2.2 billion in 2011, a 33% increase over 2010, indeed an ice progression only constrained by the worldwide economic crisis of 2009-2010. Bank of Uganda (2018) established that between 2013 and 2015.

Uganda's export earnings decreased from USD 2828.71 million to USD 2667.19 respectively and increased thereafter, the situation was made worse with the outbreak of COVID-19 in March 2021 which saw the total exports decrease by 10.8 percent in January 2021 to US$ 370.8 million from $ 415.6 million recorded in December 2020 (UBOS, 2021). Consequent to the above problem, the main objective of the research was to investigate the factors determining export performance in Uganda. However, the specific objectives are as follows: (i.) to examine the relationship between Foreign Direct Investment net inflows and export performance of Uganda from 1989 to 2020; (ii.) to establish the relationship between the inflation and export performance from 1989 to 2020; and (iii.) to examine the relationship between Real Exchange Rate and export performance from 1989 to 2020. The study therefore posits that foreign direct investment could come to the capital-importing country as a subsidiary of a foreign firm. It could also come by means of the formation of a company in which affirm in the investing company has equity holding or the creation of fixed

assets in the other country by the nationals of the investing country (AgarwalJ, 1980). The research focus was on the determinants of export performance which included but were not limited to inflation rate, real gross domestic product, real effective exchange rate and foreign direct investment net inflows for the period 1989-2019(world bank, 2020).

2. Review of Related Literature

The present study was based on both the Export-Base Theory stated by Douglas C. North (born in 1920) and the North Theory (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015; Ahmed, Enjiang & Messinis, 2007). The theory puts an emphasis particularly on the development of export sectors which has the role of a multiplier (very stimulating field), and other fields in the region are more or less subject to the export field and secure its activities (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015). Export-base theory determines regional development by supporting export which is currently broadened in connection with the processes of economic integration as without export markets the expansion of the economy is not possible (Barrell & Nigel, 1998; Basu & Srinivasan, 2002). While North Theory states three basic pillars of North theory region should be defined as an area with a common export base, the economy´s development is determined by the success of its export sector, export-base, which is the main factor determining both absolute and relative income of the region, affects the development of services and the residential potential of the area. This study was based on both the Export-Base Theory stated by Douglas C. North (born in 1920) who in the 1950s refused gradualist theories of regional development and the North Theory stated by Blazek and Uhlir (2002). Export-Base Theory advocated a gradual transfer between primitive forms of economy to developed forms and advanced that the key role in the development of individual regions in the USA was played by the demand for the products that could be produced locally in the region (Onikoyi, Awolusi & Boyede, 2014; Awolusi, 2012).

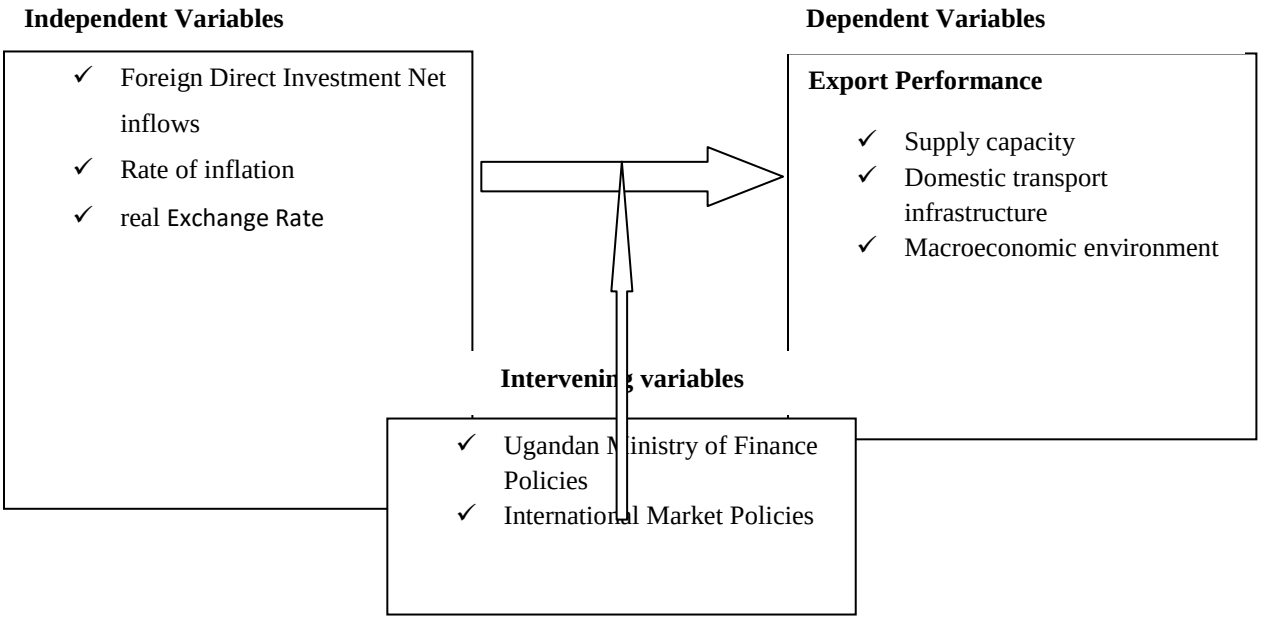
The theory puts an emphasis particularly on the development of export sectors which has the role of a multiplier (very stimulating field), and other fields in the region are more or less subject to the export field and secure its activities (Eze & Awolusi, 2018). Export-base theory determines regional development by supporting export which is currently broadened in connection with the processes of economic integration as without export markets the expansion of the economy is not possible (Ahmed, Enjiang & Messinis, 2007; Appleton, 2000). While North Theory states three basic pillars of North theory region should be defined as an area with a common export base, the economy´s development is determined by the success of its export sector, export-base, which is the main factor determining both absolute and relative income of the region, affects the development of services and the residential potential of the area. North´s theory was criticized as this theory is based on the analysis of the development in the USA and new settlements- e.g. Australia, Canada and New Zealand (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015). North advanced that export plays a key role in the development of a region which states that the larger the region is the more likely it is that the key resources for its development are within its borders this was also criticized as the development to Europe was not significantly affected by export (AgarwalJ, 1980; Agnihotri & Bhattacharya, 2015).

Foreign market access**;** this represents the foreign market potential of a country and is broader than "market access". It relates directly to the characteristics of the trading partner countries, such as the size of their market and transport facilities, it also depends positively on the size of the export basket and the number of differentiated items and their prices, which in turn are affected by market entry conditions. Trans-border costs (including tariff and non-tariff barriers) have a negative impact on foreign market access (Adeleye, Adewuyi and Adeteye 2021). Supply capacity; supply-side constraints are one of the reasons why developing countries are often unable to take up opportunities for trade under preferential trading regimes, such as the generalized system of preferences (GSP). The main components of supply capacity are internal transport costs and factors affecting the cost of production. The latter is strongly related to the domestic market structure and the institutional framework. The macroeconomic environment including factors such as GDP also has an important role in shaping the supply capacity of the economy (Adeleye et al., 2021). Domestic transport infrastructure; the size and the growth of the supply capacity of a country depend critically on the availability of physical infrastructure, ranging from roads and ports to energy and telecommunications. The UNCTAD study used internal transport infrastructure as a proxy for infrastructure as a whole. The analysis

therefore argued that internal transport infrastructures are likely to play an important role at the early stage of export sector development.

Most African countries are characterized by poor transport infrastructure and are found in all periods to be poor export performers. This indicates that African countries could raise their supply capacity by investing in transport infrastructure. Macroeconomic environment: The real exchange rate, which reflects the underlying relative movement of prices at home and abroad, has a significant effect on the export performance of the lowest performers. Results for all periods found that an overvalued real exchange rate is detrimental to export performance, while on average a 1 percent real depreciation could increase exports by 6 to 10 percent. This points to the important of the pursuit of productive gains to maintain external competitiveness the study found that an overvalued currency resulting from fixed exchange rates that are used as a nominal anchor to control inflationary pressures, translated into a direct loss of price competitiveness for exporting firms (Adeleye et al., 2021). Foreign direct investment: FDI is likely to affect export performance positively. This was true for most levels of export performance and every period under consideration. The experience in a number of countries suggested that FDI strongly contributes to the transformation of the composition of exports. For instance, FDI inflows into Singapore and China have helped to increase significantly the technological content of exports by strongly supporting the development of export supply capacity, including knowledge-based industries (Adeleye et al., 2021). The adopted conceptual framework is depicted in figure 1 below:

Figure 1: Conceptual Frame Work



Source: Wang, and Swain (1995) and UNCTAD (1999).

Trade statistics show that export earnings have increased during the post-reform period from 0.20 billion US Dollars in 1980 to 5.1 billion dollars in 2012 (UBOS, 2016). The development led to diversification in Uganda's exports which resulted in the emergence of non-traditional exports (NTEs) such as fish, simsim, maize, flowers, beans, etc. The NTEs have taken over traditional exports as a main source of foreign exchange. Their share of total formal export earnings increased slightly from 74.5% in 2014 to 75.0% in 2015 (UBOS, 2016). Among the NTEs commodities that attracted considerable earnings in 2015 were petroleum products (5.5%), fish products (5.2%), and maize (4%). However, merchandize exports fell by 1.3% to USD 300.41 million in February 2019 from USD 304.23 million in January 2019. Several exports registered decreased receipts following a decline in their respective volumes. Coffee receipts recorded the largest decline following a decline in both the quantity exported and value. Low global prices on account of higher supply from Brazil explain the fall in coffee receipts.

Foreign Direct Investment and Export Performance: Many empirical evidences are bound on FDI and Economic Growth (Jayaraman & Chee-Keong, 2006; Jin & Cho, 2018; Love, Roper & Zhou, 2016; Manzanares, 2019; Mohammed, Parker, Fand & made, 2011; Shirro, 2009; Morgan., Kaleka & Katsikeas, 2014; Njinyah, 2018; Oseni & Enilolobo, 2011; Oura, 2016; Stoian, Rialp & Rialp, 2011; Wheeler & Mody, 1992; WTO, 1995; Yan, Brouthers & Mcnicol, 2008). Abel and Nikki (2011) examined the relative impact of macroeconomic variables and institutional factors on foreign direct investments in 30 Sub-Sahara African (SSA) countries between 1995 and 2008. They found that financial development, the size of the market, infrastructural development and urban accumulations are important factors that measure the inflows of FDI to the SSA region. Behname (2012) applied a random effects model to measure the impact of foreign direct investment on economic growth in Southern Asia. The investigation concluded that foreign direct investment has a positive and significant effect on economic growth. Manzanares (2019) and Shirro (2009) disaggregated the economy and employed a structural macro-econometric model consisting of four blocks namely: supply, private demand, government and external sectors to measure the impact of FDI on economic growth. The findings showed that FDI has a significant impact on the output of the economy; however, the growth effects of FDI differ across sectors in Uganda (Manzanares, 2019; Shirro, 2009; Njinyah, 2018; Oura, 2016). The study estimated the impact of FDI inflows on economic growth in Uganda. The study reported the extent to which FDI influences economic growth positively to limited human capital. Zakia and Ziad (2007) have also measured the effect of FDI on the economic growth of Jordan. The estimated regression results pointed to the existence of a bidirectional relationship between FDI and out-put.

The study developed an auto regressive distributed lag (ARDL) model. The model examines the long-run relationship between the variables and finds an absence of a long-run relationship between FDI and economic growth. Manzanares (2019) applied the rho's rank correlation and causality test in exploring the possible links between FDI and economic growth in Uganda. The outcome revealed that the link between FDI and economic growth in Uganda is positive but weak. Certainly, the series of articles reviewed for this study showed a unidirectional causality running from FDI to economic growth. Shirro (2009) and Oura (2016) investigated economic growth through FDI (Shirro, 2009; Njinyah, 2018; Oura, 2016) and Ugochukwu, Okore and Onoh (2013) identified bidirectional causality between growth and FDI (Manzanares, 2019; Shirro, 2009; Njinyah, 2018; Oura, 2016). However, there was no evidence of causality. According to the IMF and OECD definitions, direct investment reflects the aim of obtaining a lasting interest by identifying one economy (direct investor) in an enterprise that is resident in another economy (the direct investment enterprise). The "lasting interest" implies the existence of a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence on the management of the latter. Direct investment involves both the initial transaction establishing the relationship between the investor and the enterprise and all subsequent capital transactions between them and among affiliated enterprises4, both incorporated and unincorporated (Fernando, Fitrianingrum & Richardson, 2017). Chugan and Singh (2015) analyzed the causal relationship between economic growth, exports and foreign direct investment in the European transition countries that are members of the EU (Chugan & Singh, 2015; Fernandez-Mesa & Alegre, 2015).

The results of this study indicate that the prospects for overall economic growth depend on the implemented policies to promote foreign direct investments. The author emphasizes that the most effective way to attract FDI is to focus on free trade zones, trade regimes, tax benefits, human capital in the host country, regulations of financial markets, financial system and the quality of infrastructure. For all developing countries, the impact of FDI on exports is also important in terms of defining the relevant strategies; FDI can strongly influence the growth of exports (Shen, 2013). Kaminski and Riboud warn that it is not disputed that higher potential economic growth attracts capital investment, but it should be kept in mind that these effects occur with a time lag, while this effect does not diminish their importance. Also, a negative impact on the current account is particularly present when FDI inflows are aimed at producing for the domestic market, particularly to bypass customs (Cardoza et al., 2016). According to Cardoza et al. (2016), FDI was found to have a strong dependence relationship with high-tech exports, with a much higher level of statistical significance. The results of analysis indicated a significant level of correlation between FDI and high-tech exports. The inflow of FDI is expected to increase production and productivity, encourage and stimulate local development and diffuse technology investment (Alfaroet al., 2006). It can be seen as a complement to international trade as long as the relative endowment and the remuneration of the factors of production are sufficiently different

between countries (Büthe & Milner, 2008; Camarero & Tamarit, 2003).

Inflation and Export Performance: Examining factors affecting inflation in Jordan, Jaradat, Al-Zeaud and Al-Rawahneh (2011) used quarterly data from 2000 to the third quarter of 2010 by applying the concepts of cointegration, Error Correction Model, analysis of Variance Decomposition and Impulse Response Function. The results indicated that the variables of national exports, imported inflation, credit facilities, GDP, money supply and inflation were integrated into order one. National exports, imported inflation and credit facilities had a positive long-run relationship with inflation. It was also noted GDP had a negative relationship with inflation while money supply had an insignificant effect on inflation in Jordan. The impulse responses and variance decomposition analysis also indicated that shocks on national exports, imported inflation, GDP, credit facilities and money supply influenced inflation from the second period in Jordan. Analyzing the determinants of high food prices in Pakistan by Joiya and Shahzad (2013) used the Autoregressive Distributed Lag approach and error correction model for long-run and short-run, respectively based on time series data for the period 1972-73 to 2009- 10. The findings of the study showed that food exports contributed to high food prices while food imports caused a reduction in food prices.

Similarly, Rehman and Khan (2015) in investigating the factors affecting food price inflation in Pakistan during 1990–2013 by applying econometric tests of Augmented Dickey-Fuller, Vector Error Correction model and Johansen co-integration test showed that all the variables were integrated of order one and that food exports had a positive and significant long-run impact on food price inflation in Pakistan. They concluded that because food inflation occurs due to high demand for food items only those products with excess supply should be exported. Although the studies employed different cointegration techniques for varying periods they consented to the positive effect of food exports on inflation. Exploring the determinants of inflation in Pakistan for the period 1971 to 2012 Jaradat, Al-Zeaud and Al-Rawahneh (2011) applied Johansen cointegration and Error Correction Model (ECM). The results showed that exports of goods and services had a significant negative effect on inflation because higher exports increased domestic production which led the firm to achieve economies of scale and cost of production decline. In the same way [22] analyzed the major determinants of inflation in Bangladesh using data for the period from 1978 to 2010. The findings based on correlation coefficients indicated a weak negative association between imports, exports, government revenue, money supply and inflation. On the other hand, long-run analysis indicated that exports had a negative effect on inflation in Bangladesh.

Even though the studies consented to the negative effect of exports on inflation, the lack of information on the direction of causality and how shocks in exports influence inflation given that causality, variance decomposition and impulse response analysis tests were not conducted makes the studies inconclusive on the relationship between exports and inflation. Olatunji, Omotesho, Ayinde and Ayinde (2017) examined the factors affecting inflation in Nigeria using time series data employed for the study. The use of unit root, cointegration and error correction analysis indicated that the study variables were normally distributed and integrated of order one. Total export, interest rate and crude oil exports were found to have a negative impact on inflation while total imports and food price index exerted a positive effect (Blazi & Awolusi, 2020). Total government expenditure had an insignificant effect on inflation with inflation in the short run correcting disequilibrium at the rate of 70% in the next period. The review of the study indicated that important relationship analysis techniques such as causality, variance decomposition and impulse response analysis tests were not utilized making the study findings inconclusive for analyzing the relationship between inflation and its determinants of exports, interest rate, crude oil imports and food price index.

Despite the fact that this study was similar to many empirical literature, the conclusions of many previous studies were based on past events and not the present leaving a time gap in the difference between changes that occurred then and now (Beleska-Spasova, 2014; Ayanwale, 2007). Therefore this study considered events and situations occurring in 2021 affecting determents of export performance in Uganda. Moreover, the literature reviewed was done in different geographical areas and not Uganda. With such differences in geographical scope come differences in environmental conditions which influence the interplay of the different variables like determinants of export performance (Ayanwale, 2007; Appleton, 2000). This influences the nature of the outcome. For example, some studies were conducted in developed countries where advanced technologies, among others, are used compared to what would be used in Uganda in exportation. Therefore the present study was conducted in Uganda and the

findings were compared with those of the other countries. Lastly, much of the reviewed literature features different methodological approaches in terms of the research designs, population, study area, sample size and tools for data collection; with such methodology, findings will differ (Ayanwale, 2007; Adofu, 2009). Consequently, the adopted methodology in the present study was uniquely designed to fit Uganda's scenario.

3. Methodology

The research design flows from the objectives, questions or hypothesis being addressed by the present study and the methods used to collect data had the greatest practical utility in obtaining the information required. The study therefore adopted a statistical research design based on secondary data collected (1989-2020) from various sources, such as the Bank of Uganda Economic bullet, Uganda Economic Survey (2008), National Bureau of Statistics (NBS), IMF and World Bank websites.

Model Specification: The model is based on the Export-Base Theory stated by Douglas C. North (born in 1920) and the North Theory (Chugan & Singh, 2015). The theory puts an emphasis particularly on the development of export sectors which has the role of a multiplier (very stimulating field), and other fields in the region are more or less subject to the export field and secure its activities (Aina, Awolusi & Odunlami, 2015). Export-base theory determines regional development by supporting export which is currently broadened in connection with the processes of economic integration as without export markets the expansion of the economy is not possible (Bhagwati 1978; Bosscher & Smit, 1998). The theory focuses on factors of foreign Direct Investment, Exchange rate, Inflation rate and Terms of Trade as affecting the export performance of the countries. The present study used a multiple regression model. The general model is expressed as:

$Y=\beta 0+\beta 1X1+\beta 2X2+\beta 3X3+\beta 4X4+\beta 5X5+\beta nXn+\mu$……..*equation (1)*
The underlying objective is to determine whether or not Foreign Direct Investment, Exchange rate, Inflation rate and Terms of Trade are significant determinants of the country's export performance. Therefore export is the dependent variable.
Thus Export Performance is a function of the following variables:
EXP= f (GDP, FDI, EXR, INF, TOT)……*equation* (2)

Estimation Model: To test the above relationship, the following estimation model was used.
$EXP = \beta 0 + \beta 1 FDI + \beta 2 EXR + \beta 3 INF + \beta 4 TOT + \mu$……..*equation* (3)
Where,
EXP = Annual Export value from Uganda to the rest of the world in % change. (Traditional & Nontraditional Exports)
FDI = Measures the annual inflows of foreign direct investment to Ugandan in % change
EXR= Represent macro-economic environment measured by the annual average of Real Exchange for the period of analysis.
INF= Indicates the annual average of Inflation rate over the period of analysis
TOT=Annual average Terms of Trade over the period of study
μ represents an error term

The variables were transformed into natural logarithms to minimize the chance of committing specification errors. Hence the transformation can be expressed as:-
$Ln\ EXP = \beta 0 + +\beta 1\ ln\ FDI + \beta 2\ ln\ EXR + \beta 3\ ln\ INF + \beta 4\ ln\ TOT + \mu$……..*equation (*4)
The estimation technique used was the Ordinary Least Square (OLS). This technique was chosen because of the nature of the dependent variable. Since this study is a time series in nature it also examined the time series characteristics of the variables to be modeled, testing for stationary and co-integration of the variables. It is important to test the order of integration of each variable in a model, to establish whether it is non-stationary and how many times the variable needs to be differenced to derive a stationary series. There are several ways of testing for a unit root. In this study, we applied the Augmented Dickey-Fuller (ADF). Philip and Perron (1988), propose a non-parametric method of controlling for higher-order serial correlation in a series.

Unlike ADF, the Philip-Perron test corrects the t-statistic of the dependent variables in the auto-regressive process to account for the serial correlation in random terms (Blazi & Awolusi, 2020). There was a need to know the underlying process that generates our time series variables: that is whether the variables are stationary or non-stationary. Non-stationary variables might lead to spurious regressions. In this case, the results may suggest statistically significant relationships between the variables in the model, when in fact this is just evidence of contemporaneous correlation. The ADF test assumes that the data generation process is auto-regressive to the first order. This is done so that the autocorrelation in the error term does not bias the test. In testing for co-integration, the residual-based co-integration test (Chugan & Singh, 2015) and the likelihood ratio test of Johansen (1991, 1995) are the most used in applied econometrics. However, Engle-Granger is criticized because it assumes only one co-integrating relation between the variables. We therefore use the Johansen procedure which is based on a VAR model and assumes the possibility of more than one co-integrating relation between the variables. The Johansen co-integration test is a sequence of tests. The null hypothesis of rank (r) = 0 (i.e. no cointegration relationship) is first tested and, if rejected, subsequent null hypotheses (Ho: r = 1, Ho: r = 2, etc.) are tested until a null can no longer be rejected. The procedure implies enquiring whether any co-integrating relation exists at all, and in the affirmative finding out exactly how many can be identified. J-B test was used to ascertain whether the errors of regression are normally distributed.

The normal distribution has a skewness coefficient of zero and a kurtosis coefficient of three. J-B test is optimal in the sense that the Lagrange Multiplier test (LM) for the null hypothesis of normality against the maintained hypothesis is generated by the Pearson family of distributions. LM test has the maximum asymptotic power, which means that the departure of road infrastructure, education infrastructure, health infrastructure, labor, capital, interest rate and economic growth from the normal distribution except employment was suggested with the use of p-values associated with Jaque-Bera test statistics. Kurtosis variables are all less than three and the distribution of variables exhibits non-stationarity (Stock and Watson, 2006). The positive signs of the skewness for all the variables are indicative of variables with long tails. In this study, the Breusch Pagan Cook-Weisberg test for Heteroscedasticity was used to test if the residuals from the regression model are homoscedastic or not (Ayanwale, 2007; Appleton, 2000; Adofu, 2009). Lastly, the Breusch–Godfrey (BG) test used serial correlation, BG test was based on the Lagrange Multiplier principle chosen since other tests have drawbacks that made the BG test to be favored (Ayanwale, 2007). The decision rule was based on the p-value of 0.05 level of significance.

4. Results and Discussion of Findings

This section presents a review of the data with an empirical analysis concentrating on the major variables that were stated in the methodology. The study set to assess the determinants of export performance in Uganda (1989-2019). The study objectives were to examine the relationship between Foreign Direct Investment net inflows and export performance secondly to establish the relationship between the inflation and export performance and to examine the relationship between Real Exchange Rate and export performance. The study used a combination of graphical and empirical tools for carrying out the analysis to answer all the objectives that were inherently stated in the study.

Results: The first section of the analysis involves carrying out a comprehensive univariate analysis of each of the variables. This is intended to discover any forms and nature of trends in the data before carrying out an in-depth analysis. It involved the use of both descriptive statistics. Further presentations involve the analysis of association and the relationship between the variables. This is intended to discover any forms and nature of trends in the data before carrying out an in-depth analysis. It involved the use of both descriptive statistics and graphics for summarizing the data.

Descriptive Statistics of the Variables: Table 1 presents a summary of descriptive statistics for the variables considered for analysis namely exports, foreign direct investments, real exchange rate, inflation and terms of trade. It described the distribution of each variable with respect to mean, standard deviation, minimum and maximum values for the 32 observations.

Table 1: Descriptive Statistics of the Variables

	EXPORT	RER	INFLATION	TOT
Mean	12.93688	1936.400	6.763437	36.34313
Median	12.77000	1781.075	6.320000	36.03000
Maximum	24.28000	3727.000	15.12000	56.25000
Minimum	6.100000	3.040940	0.060000	26.04000
Std. Dev.	3.825880	999.5412	3.810256	6.608363
Sum	413.9800	61964.81	216.4300	1162.980
Observations	32	32	32	32

Source: Researcher estimation using E-views 10, 2022.

In the findings of descriptive statistics from the above table, the mean, median, maximum, minimum values and standard deviations of the considered variables are exposed. When this study compared the descriptive statistics among variables, trade openness had a high mean value of 36.34 while inflation had the lowest mean which was 6.7, the mean for export was 12.9 and that of the real exchange rate was 1936 (not percentage change). In terms of standard deviation, terms of trade had the highest standard deviation while the lowest was 3.82 and the real exchange rate was 999. Inflation had 3.8; the results imply that the data is descriptively structured based on the data with the variables revealing increase and decreasing trends.

Stationarity Test: To test the stationarity of the relevant variables and determine their order of integration, Augmented Dickey-Fuller (ADF) was used (Awolusi, 2021), and the results are reported in Table 2. The number of lags was determined based on a maximum lag of 10 sets based on the rule of thumb (Awolusi, 2021). It is noted that FDI and TRDOP were tested at lag 1, GDPPC was tested at lag 0, and GE was tested at lag 2. The test was performed on all the variables in their natural logarithm (ln) form to account for the possible presence of heteroskedasticity (Awolusi & Mbonigaba, 2020). The rejection criteria are that we reject the null hypothesis if the test statistic value is greater than their respective critical values of 0.05 level of significance and if the p-value is less than 0.05 (Awolusi & Mbonigaba, 2020b).

Table 2: ADF Stationarity Tests

Variables	Stationary Order	ADF Test Statistic	Critical Values			P-Value
			1%	5%	10%	
Export	I(I)	-6.09	-3.61	-2.96	-2.61	0.000
FDI	I(0)	-3.07	-3.67	-2.95	-2.62	0.039
RER	I(I)	-6.20	-3.61	-2.61	-2.61	0.000
Inflation	I(0)	-3.82	-3.66	-2.96	-2.61	0.006
ToT	I(I)	-5.39	-3.67	-2.96	-2.62	0.001

Source: Researcher estimation (2022) using Data from the World Bank.

Results in that variables are stationary in Logarithm are FDI and Inflation except for export performance, real exchange rate and terms of trade which is stationary in the first difference at a 5% level of significance, because their absolute values of the Test statistics were smaller than the values of the 5% critical value. The Stationarity of the variables was ascertained based on the test statistic value being more than the critical value at 5 percent. This Stationarity test gives the right to proceed with the cointegration test and estimation of the designed ordinary least square model.

Co-Integration Test: After establishing that all the variables are integrated of order one and determining the optimal lag length, it is appropriate to test for cointegration to discover if the relevant variables have a long-run relationship. Johansen cointegration test was employed to determine the possible number of cointegrating equations in the model (Awolusi, 2009). The decision criterion is that Trace statistics and max statistics are compared to their respective 5% critical value. If the trace statistics and max statistics are greater than the critical value, the null hypothesis of (no cointegration) is rejected and vice versa (Awolusi, 2021; Awolusi & Mbonigaba, 2020).

Table 3: Johansen Co-Integration Test

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.788285	86.73903	69.81889	0.0013
At most 1	0.486124	40.16359	47.85613	0.2167
At most 2	0.353351	20.19037	29.79707	0.4100
At most 3	0.210877	7.111839	15.49471	0.5647
At most 4	0.000228	0.006840	3.841466	0.9335

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values
Normalized cointegrating coefficients (standard error in parentheses)

EXPORT	FDI	RER	INFLATION	TOT
1.000000	-8.509392	-0.004211	-1.459819	1.935813
	(0.99331)	(0.00112)	(0.27436)	(0.27155)

Source: Researcher estimation (2022) using Data from the World Bank.

Results in Table 3 indicate the presence of a cointegration relation between the variables studied. The results of Trace and Maximum Eigenvalue tests indicate that at the 5% significance level with co-integrations. As seen from the Trace statistics which indicate that the variables are cointegrated. The guideline is that when the Trace statistics is more than 5 % percent Critical value, we reject the null hypothesis also, when the maximum Eigen value is more than the critical value at 5 percent, we reject the null hypothesis. The test indicates that not only are the trace statistics more than the critical level there is also a cointegration level. The null hypothesis of no co-integration equation is strongly rejected with a probability of 0.5 percent. Thus, the variables under study have long-run relationships among them.

Correlation Analysis between the Variables: The correlation analysis for the variables was performed and tests to determine whether there is a positive relationship between the variables (Awolusi, 2009). The results attained from the study are provided in the Tabulation provided in Table 4.

Table 4: Correlation Analysis between the Variables

	FDI	RER	INFLATION	TOT	EXPORT
FDI	1	0.2418610	-0.024233	0.569449	0.6700
RER	0.2418610	1	-0.325208	0.438566	0.5656
INFLATION	-0.024233	-0.325208		0.011622	0.0150
TOT	0.569449	0.438566	0.011622	1	0.77157
EXPORT	0.670025	0.565647	0.015060	0.771575	1

Source: Researcher estimation (2022) using Data from the World Bank.

From the table above, it is observed that all the variables are correlated positively. We are interested in the correlation of the variable beginning with exports and year which is going to be equal to 0.670 going on further we could see the correlation between export and year as export and GDP, and again we could look at the correlation between the other variables as indicated in the correlation matrix.

Relationships between Foreign Direct Investment Net Inflows and Export Performance from 1989 to 2020: The first objective of the study was to examine the relationship between Foreign Direct Investment net inflows and export performance. To test this, ordinary least square was employed to determine the relationship between foreign direct investments and export performance in Uganda from 1989 to 2020. The results attained are presented in Table 5 presented and interpreted below.

Table 5: Relationship between Foreign Direct Investment Net Inflows and Export Performance from 1989 to 2020

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	0.913405	0.345114	2.646673	0.0130
TOT	0.334167	0.074666	4.475502	0.0001
C	-1.862967	2.330014	-0.799552	0.4305
R-squared	0.674059	Mean dependent var		12.93688
Adjusted R-squared	0.651580	S.D. dependent var		3.825880
S.E. of regression	2.258306	Akaike info criterion		4.556167
Sum squared resid	147.8984	Schwarz criterion		4.693579
Log-likelihood	-69.89867	Hannan-Quinn criteria.		4.601715
F-statistic	29.98657	Durbin-Watson stat		1.738118
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

To determine the relationship between Foreign Direct Investment net inflows and export performance from 1989 to 2020, the results presented the R-squared value of 0.67, on the regression coefficient between the FDI and export performance in Uganda, the coefficient denotes a 67% change in export performance is caused by the foreign direct investment net flows, the adjusted r-square show that for this change to occur, the data of 0.651 data is accounted, in this case foreign direct investments determine the export performance by 65.5% of the data accounted. The findings from the above table indicate that all the coefficient of that is foreign direct investments is statistically significant at a 5% level of significance in explaining variations in the export performance of Uganda because their p-values of 0.0130 which is less than 0.05 other variables in the model, even terms of trade had 0.0001. This study therefore concludes that FDI had a significant determination on the export performance of Uganda from 2020. From the above regression table, the following equation can be derived;

$$Export\ Performance\ -1.862967 + 0.913405\ FDI$$

The interpretation of the above equation is that a unit increase in foreign direct investments increases the export performance units by 0.913. The findings also indicate that the p-value is less than a 5% confidence interval implying that the model is statistically significant at a 5% level of significance.

Relationships between Inflation and Export Performance from 1989 to 2020: The first objective of the study was to examine the relationship between inflation and export performance. To test this, ordinary least square was employed to determine the relationship between inflation and export performance in Uganda from 1989 to 2020. The results attained are presented in Table 6 and interpreted below.

Table 6: Relationships between Inflation and Export Performance from 1989 to 2020

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DINF	0.047326	0.022093	2.142144	0.0407
DTOT	0.727450	0.051258	14.19195	0.0000
C	-0.021012	0.032789	-0.640812	0.5267
R-squared	0.883633	Mean dependent var		0.056509
Adjusted R-squared	0.875608	S.D. dependent var		0.519188
S.E. of regression	0.183114	Akaike info criterion		-0.468354
Sum squared resid	0.972393	Schwarz criterion		-0.330941
Log-likelihood	10.49367	Hannan-Quinn criteria.		-0.422806
F-statistic	110.1056	Durbin-Watson stat		2.537325
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

To determine the relationship between inflation and export performance from 1989 to 2020, the results presented the R-squared value of 0.88, on the regression coefficient between the inflation and export performance in Uganda, the coefficient denotes an 88% change in export performance is caused by inflation,

the adjusted r-square show that for this change to occur, the data of .87 data is accounted, in this case inflation determine the export performance by 87% of the data accounted. The findings from the above table indicate that all the coefficient of that is inflation is statistically significant at a 5% level of significance in explaining variations in export performance in Uganda because their p-values of 0.0407 which is less than 0.05 other variables in the model, even terms of trade had 0.000. This study therefore concludes that inflation has had a significant determination on the export performance of Uganda from 2020. From the above regression table, the following equation can be derived;

$$Export\ Performance\ -0.021012 + 0.047326\ Inflation$$

The interpretation of the above equation is that a unit decreases in inflation increases the export performance units by 0.047. The findings also indicate that the p-value is less than a 5% confidence interval implying that the model is statistically significant at a 5% level of significance.

Relationships between Real Exchange Rate and Export Performance from 1989 to 2020: The first objective of the study was to examine the relationship between real exchange rate and export performance. To test this, ordinary least square was employed to determine the relationship between real exchange rate and export performance in Uganda from 1989 to 2020. The results attained are presented in Table 7 presented and interpreted below.

Table 7: Relationships between Real Exchange Rate and Export Performance from 1989 to 2020

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RER	0.001077	0.000462	2.332953	0.0268
TOT	0.375256	0.069827	5.374040	0.0000
C	-2.786633	2.327236	-1.197400	0.2408
R-squared	0.659275	Mean dependent var		12.93688
Adjusted R-squared	0.635777	S.D. dependent var		3.825880
S.E. of regression	2.308952	Akaike info criterion		4.600525
Sum squared resid	154.6066	Schwarz criterion		4.737938
Log-likelihood	-70.60840	Hannan-Quinn criteria.		4.646073
F-statistic	28.05635	Durbin-Watson stat		1.799624
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

To determine the relationship between the real exchange rate and export performance from 1989 to 2020, the results presented the R-squared value of 0.65, on the regression coefficient between the real exchange rate and export performance in Uganda, the coefficient denotes a 65% change in export performance is caused by the real exchange rate, the adjusted r-square show that for this change to occur, the data of 0.63 data is accounted, in this case real exchange rate determine the export performance by 63% of the data accounted. The findings from the above table indicate that all the coefficient of that is real exchange rate is statistically significant at a 5% level of significance in explaining variations in the export performance of Uganda because their p-values of 0.0268 which is less than 0.05 other variables in the model, even terms of trade had 0.0000. This study therefore concludes that the real exchange rate had a significant determination on the export performance of Uganda from 2020. From the above regression table, the following equation can be derived;

$$Export\ Performance\ -2.786633 + 0.001077\ RER$$

The interpretation of the above equation is that a unit increases in real exchange rate increases the export performance units by 0.001. The findings also indicate that the p-value is less than a 5% confidence interval implying that the model is statistically significant at a 5% level of significance.

Determinants of Export Performance in Uganda (1989-2020): Here the researcher conducted a multiple regression analysis to assess the determinants of export performance in Uganda from 1989 to 2020. The findings based on the attained information are provided.

Table 8: Determinants of Export Performance in Uganda (1989-2020)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	0.939614	0.311208	3.019245	0.0055
RER	0.001291	0.000438	2.950945	0.0065
INFLATION	0.128882	0.103219	1.248635	0.2225
TOT	0.244432	0.073793	3.312397	0.0026
C	-2.049594	2.185168	-0.937957	0.3566
R-squared	0.753755	Mean dependent var		12.93688
Adjusted R-squared	0.717274	S.D. dependent var		3.825880
S.E. of regression	2.034295	Akaike info criterion		4.400777
Sum squared resid	111.7357	Schwarz criterion		4.629798
Log-likelihood	-65.41243	Hannan-Quinn criteria.		4.476691
F-statistic	20.66172	Durbin-Watson stat		2.038464
Prob(F-statistic)	0.000000			

Source: Researcher estimation (2022) using Data from the World Bank.

The findings from the above table indicate that all the coefficients of two independent variables determining export performance are statistically significant at a 5% level of significance in explaining variations in the export performance of Uganda because their p-values were 0.005 and 0.006 which is less than 0.05 other variables in the model inflation had 0.22 insignificant. This study therefore concludes that FDI and real exchange rate are significant determinants of export performance in Uganda for the period under review while the rest of the variables. From the above regression table, the following equation can be derived;

$Export\ Performance = -2.049594 + 0.939614\ \text{FDI} + 0.001291\text{RER}$

The findings also indicate that the p-value for the model is greater than 0.05 implying that the model is statistically significant at a 5% level of significance. Furthermore, the R-squared value shows that a combination of all the independent variables accounts for 75.1% changes in export growth in Uganda.

Diagnostic Tests

Variable Inflation Factor

Table 9: Variable Inflation Factor

Variable	Coefficient Variance	Un Centered VIF	Centered VIF
FDI	0.096851	7.811154	1.483003
RER	1.91E-07	6.982449	1.432545
INFLATION	0.010654	4.927203	1.158665
TOT	0.005445	57.39715	1.781366
C	4.774958	36.92253	NA

Source: Researcher estimation (2022) using Data from the World Bank.

The diagnostic tests for the regression model show that there exist no instances of collinearity as the VIF statistics associated with each of the independent variables in the model were within the acceptable range. For instance, consumption (FDI = 1.4), RER (VIF = 1.43) and Real exchange rate (VIF = 1.15).

Normality Test: The results of our normality tests show that residuals are normally distributed (the probability of Jarque-Bera is 19 which is greater than 0.05 (5%) confidence interval, and is greater than the critical probability 5%). The confirmation of residual normality as shown by the table above implies that the estimated linear regression model has realistic predictive powers, and valid predictions can be drawn from its results.

Serial Correlation

Table 10: Serial Correlation

F-statistic	**0.688889**	**Prob. F(2,25)**	**0.5114**
Obs*R-squared	**1.671442**	**Prob. Chi-Square(2)**	**0.4336**

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 03/04/22 Time: 23:19
Sample: 1989 2020
Included observations: 32
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI	-0.156286	0.356438	-0.438466	0.6648
RER	-0.000122	0.000458	-0.267387	0.7914
INFLATION	-0.042888	0.111155	-0.385837	0.7029
TOT	0.046866	0.091157	0.514122	0.6117
C	-0.741615	2.423595	-0.305998	0.7621
RESID(-1)	-0.118793	0.232884	-0.510094	0.6145
RESID(-2)	-0.250110	0.217320	-1.150884	0.2607

R-squared	0.052233	Mean dependent var	3.22E-15
Adjusted R-squared	-0.175232	S.D. dependent var	1.898519
S.E. of regression	2.058149	Akaike info criterion	4.472131
Sum squared resid	105.8994	Schwarz criterion	4.792761
Log-likelihood	-64.55409	Hannan-Quinn criteria.	4.578411
F-statistic	0.229630	Durbin-Watson stat	1.992118
Prob(F-statistic)	0.963044		

Source: Researcher estimation (2022) using Data from the World Bank.

The study results indicate that there is no serial correlation at larger order in the data between the determinants of export performance in Uganda from 1989 to 2020, the P-value for the study was 0.000 which is less than the 5% confidence interval. The results indicated that there is no serial correlation between the variables under the study.

Heteroskedasticity Test

Table 11: Heteroskedasticity Test

F-statistic	**0.331840**	**Prob. F(1,29)**		**0.5690**
Obs*R-squared	0.350712	Prob. Chi-Square(1)		0.5537
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.878334	1.567769	2.473791	0.0195
RESID^2(-1)	-0.106538	0.184944	-0.576055	0.5690
R-squared	0.011313	Mean dependent var		3.498016
Adjusted R-squared	-0.022779	S.D. dependent var		7.828576
S.E. of regression	7.917239	Akaike info criterion		7.038303
Sum squared resid	1817.798	Schwarz criterion		7.130818
Log-likelihood	-107.0937	Hannan-Quinn criteria.		7.068461
F-statistic	0.331840	Durbin-Watson stat		2.005674
Prob(F-statistic)	0.569022			

Source: Researcher estimation (2022) using Data from the World Bank.

The Breusch–Pagan Lagrangian multiplier test is conducted to test for the presence of Heteroscedasticity (Awolusi, 2021; Awolusi & Mbonigaba, 2020b). H0: Null = constant variance, homoskedasticity H1: ALT = non-constant, heteroscedasticity Since the corresponding probability value is less than 5% we reject the null and accept the alternative, which indicates that our variables are non-constant.

Discussion of Findings: The discussion is made with reference to other similar works done in previous studies. The section then concludes these discussions after which it offers its recommendations. This section was further organized into three subsections with respect to the research objectives that guided the study.

Relationship between Foreign Direct Investment Net Inflows and Export Performance: The study results show that there is a significant relationship between foreign direct investments and export performance. The results are in agreement with those of Behname (2012) applied the random effects model to measure the impact of foreign direct investment on economic growth in Southern Asia. The investigation concluded that foreign direct investment has a positive and significant effect on economic growth. The results agree with those of Ayanwale (2007) and Awolusi (2009). Both studies developed an autoregressive distributed lag (ARDL) model. The model examines the long-run relationship between the variables and finds an absence of a long-run relationship between FDI and economic growth. The results are in agreement with those of Freeman, Styles, and Lawley (2012) who analyzed the causal relationship between economic growth, exports and foreign direct investment in ten European transition countries that are members of the EU (Freeman, Styles, & Lawley, 2012).

The results of this study indicate that the prospects for overall economic growth depend on the implemented policies to promote foreign direct investments. The authors emphasize that the most effective way to attract FDI is to focus on free trade zones, trade regime, tax benefits, human capital in the host country, and regulations of financial markets, financial system and the quality of infrastructure although not in agreement with those of Mitic (2016), FDI was found to have a strong interdependence relationship with high-tech exports, with a much higher level of statistical significance. The results of the analysis indicated a significant level of correlation between FDI and high-tech exports. The inflow of FDI is expected to increase production and productivity, encourage and stimulate local development and diffuse technology investment.

Relationship between Inflation and Export Performance: The study results show that there is a significant relationship between inflation and export performance. The study reveals that there is a significant connection between inflation and the export performance of the countries. The study is in agreement with those of Jarada, Al-Zeaud and Al-Rawahneh (2011) used quarterly data from 2000 to the third quarter of 2010 by applying the concepts of cointegration, Error Correction Model, analysis of Variance Decomposition and Impulse Response Function. It was also noted GDP had a negative relationship with inflation while money supply had an insignificant effect on inflation in Jordan. The findings are in agreement with those of Joiya and Shahzad (2013) used the Autoregressive Distributed Lag approach and error correction model for long-run and short-run, respectively based on time series data for the period 1972-73 to 2009- 10. The findings of the study showed that food exports contributed to high food prices and finally Rehman and Khan (2015) investigated the factors affecting food price inflation in Pakistan from 1990 to 2013 by applying econometric tests of the Augmented Dickey-Fuller, Vector Error Correction model and Johansen co-integration test showed that all the variables were integrated of order one and that food exports had a positive and significant long-run impact on food price inflation in Pakistan.

The findings also agree with those of Jaradat, Al-Zeaud and Al-Rawahneh (2011) applied the Johansen cointegration and Error Correction Model (ECM). The results showed that exports of goods and services had a significant negative effect on inflation because higher exports increased domestic production which led the firm to achieve economies of scale and cost of production decline. In the same way, Ayanwale (2007) analyzed the major determinants of inflation in Bangladesh using data for the period from 1978 to 2010. The findings based on correlation coefficients indicated a weak negative association between imports, exports, government revenue, money supply and inflation. The results are in disagreement with those of Olatunji, Omotesho, Ayinde and Ayinde (2017) examined the factors affecting inflation in Nigeria using time series data employed for the study. The use of unit root, cointegration and error correction analysis indicated that the study variables were normally distributed and integrated of order one. Total export, interest rate and

crude oil exports were found to have a negative impact on inflation while total imports and food price index exerted a positive effect.

Relationship between Real Exchange Rate and Export Performance: The study results show that there is a significant relationship between real exchange rate and export performance. The study reveals that there is a significant connection between the real exchange rate and the export performance of the countries. The findings agree with many previous studies (Camarero & Tamarit, 2003; Cardoza et al., 2016; Chugan & Singh, 2015; Fernandez-Mesa & Alegre, 2015). Camarero & Tamarit (2003) and Cardoza et al. (2016) studied the impact of exchange rate volatility on exports in four East Asian countries (Hong Kong, South Korea, Singapore, and Thailand). Findings revealed that exchange rate volatility has negative impacts on exports in both the short-run and long-run periods. Ayanwale (2007) and Awolusi (2009) also observed that a competitive real exchange rate is associated with Nontraditional export success. Using time series, a study on Tanzania's nontraditional exports revealed a statistically significant relationship between real devaluation and nontraditional export growth. Although in disagreement with those of Ayanwale (2007) and Awolusi (2009) whose findings revealed that exchange rate volatility has negative impacts on exports in both the short run and long run periods.

The results are in agreement with those of Ayanwale (2007) and Awolusi (2009), a competitive real exchange rate is associated with Nontraditional exports success. Using time series, a study on Tanzania's nontraditional exports revealed a statistically significant relationship between real devaluation and nontraditional export growth. The study results are in agreement with those of Ayanwale (2007) while studying South Africa's export performance, determinants of export supply found that exchange rate depreciation on average positively affects export performance. Results showed that export growth is not predominantly dependent on the economic prosperity of South 20 Africa's trading partners or their ability to compete in the export market based on price. Export volumes are determined by the profitability of export supply and factors which raise the output price and reduce the cost of production to enhance export performance. The impact of exchange rate volatility on exports in four East Asian countries (Hong Kong, South Korea, Singapore, and Thailand) revealed that exchange rate volatility has negative impacts on exports in both the short-run and long-run periods.

5. Conclusion, Recommendations and Implications

Conclusion: The study is set to investigate the factors determining export performance in Uganda. The specific objectives of the study are to examine the relationship between Foreign Direct Investment net inflows and export performance of Uganda from 1989 to 2020; secondly to establish the relationship between inflation and export performance and finally to examine the relationship between Real Exchange Rate and export performance from 1989 to 2020. The study adopted a longitudinal design and the analysis was based on stationarity tests, co-integration tests, ordinary least squares tests and finally diagnostic tests. The study results show that there is a significant relationship between foreign direct investments and export performance. Secondly, it was found that there was a relationship between inflation and export performance. The study also observed a significant relationship between inflation and export performance. Finally, it was found that the real exchange rate affect export performance. The study results show that there is a significant relationship between foreign direct investments and export performance. The study concludes that the development of foreign direct investments induces the export performance hence a conclusion that the export performance can be generated through foreign direct investments.

In addition, the study also observed a significant relationship between inflation and export performance. The study reveals that there is a significant connection between inflation and the export performance of the countries. The study concludes that low or reduction in inflation can generally induce the export performance of Uganda. The study concludes that the state of inflation reduction can be a general development of the export performance for the countries. The study concludes that the country's reduction of inflation is key in generating and increasing export performance. Lastly, the present study also observed a significant relationship between real exchange rate and export performance. The study reveals that there is a significant connection between the real exchange rate and the export performance of the countries. The real exchange rate is a key determinant of the export performance in Uganda from 1989 to 2020. The study concludes that the state

of the real exchange rate reduction is fundamental and can be developed in the development of export performance. The state of exports can be significantly increased with the real exchange rate in the country.

Recommendations

Relationship between Foreign Direct Investment Net Inflows and Export Performance: The study on the first objective recommends that: The government should however put in place measures to limit FDI's from coming along with experts from their home countries but rather employ the local people this will reduce problems of retrenchment or lay off some workforce that comes along with privatization. This will also solve the problem of limited skills and lead to skills improvement among the people as well as reduce unemployment. There is a need for regulations and monitoring is adequately needed to ensure the proper form of foreign businesses in the country together with enhancing the management situation for the management of the business. There is a need for deliberate efforts to promote financial corporations including monetary authorities and deposit money banks, as well as other financial corporations like finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies.

In addition, Policies that encourage financial inclusion can also be implemented to increase access to finance. There is a need for the development of foreign direct investments needed to enhance the export performance of the countries. Policies that provide incentives to foreign businesses need to be provided to engineer and attract potential investments of value from foreigners needed in the generation of products and or services necessary for exports. The government needs to provide more land for the investors to enable them to have investments enhanced in the growth and sustainability of the businesses. The study recommends adequate and timely allocations of land to these investors so that their activities are less or not frustrated. All these are intended to entice the investors in the establishment of production plants for the generation of exports. There is adequately need for an adequate policy on the development and management of the FDIs to avoid the negative effect of some trade of FDI nature, regulations and monitoring is adequately needed to ensure proper form of foreign businesses in the country together with enhancing the management situation for the management of the business for economic growth.

Relationship between Inflation and Export Performance: Secondly, Inflation needs to be reduced, the policies intended to reduce inflation as its presence presents negative effects on exports and the policies aimed at reducing inflation are needed to increase the capacity of the businesses to operate and attain mechanisms for the reduction of inflation. The increase in imports can be seen to be inflationary and thus measures must be implemented to combat the soaring import levels. This might be done to discourage imports in favor of domestically produced products. Such measures may include availing incentives and other schemes to domestic producers so that they remain competitive and produce quality products at affordable prices and costs. Moreover, measures and schemes can be used to promote imports of productive goods or goods that are strategic to the functioning of the economy. From the positive short-run relationship between gross savings and gross domestic product policy implications must therefore be designed in a manner that encourages individuals to save more.

As such can encompass increasing interest rates on deposits and lowering deposit fees. An increase in interest rates on savings deposits is therefore a means to continually lure customers to save more. This should be coupled with a reduction in the deposit fee. Measures are also recommended that steps be undertaken to promote economic growth by creating employment, investing in capital accumulation and technological advancement. Moreover, economic growth initiatives can be enhanced through strategic import promotion of capital goods that are pivotal to economic growth. Such imports of capital goods can be incentivized or can involve import schemes being given to strategically important industries. The government needs to refocus on investing more in the health systems to increase the system functionality and have it vibrant to generate economic growth improvement for the country, there is a need for more concerted efforts in improving the state of the health systems through increasing personnel, tools and infrastructure systems to enhance effectiveness in performance.

Relationship between Real Exchange Rate and Export Performance: The study recommends that there is a need to increase the value of the currency through the government embarking on industrialization, and

modern techniques of agricultural production since this area can employ a large population resulting in high productivity hence economic growth including attaining the products and services for export. The government should also embark on strong fiscal policy to reduce the unnecessary money supply which can lead to inflation that negatively impacts on economy and reduces economic growth. A high rate of growth in exports is associated with periods of undervalued currencies. There is a need for if possible a policy on undervaluation which serves as a second-best policy to nullify the disproportional additional transaction costs the tradable sector suffers due to institutional weaknesses and market imperfections. The export expansion achieved through undervaluation, however, comes at a heavy price for Uganda. The net welfare effects of maintaining an undervalued real exchange rate through reserve accumulation therefore depend on the balance between the welfare losses that arise due to higher inflation and lower tradable absorption (because undervaluation removes tradable goods from the economy) versus the dynamic gains from higher growth that comes due to positive externalities generated by expansion of the tradable sector.

A reduction in domestic savings and investment due to undervaluation-induced inflation could be the other channel by which undervaluation may undermine growth. There is a need for identifying the channels, by which such adverse effects are felt, such as whether it is through distortionary taxation or its impact on the prices of non-tradable or a combination of them will provide important policy inputs. The competitiveness of the domestic market structure, as well as the supply and quality of infrastructural facilities and the skill base of the economy, are also important constraints that must be addressed to achieve a shift in export diversification. There is a need to streamline the policy on education to make it more skillful to encourage job creators for economic development. The budget of the education system was low and hence needs to be increased if human development can be improved to generate the country's growth. The development of the education sector could improve the state of the education sector performance necessary for improving the growth of the economies and development of appropriate means to the development of the economies for scale in the countries.

Implications and Contribution to Knowledge: The study aims to investigate the factors determining export performance in Uganda. The objectives were to examine the relationship between Foreign Direct Investment net inflows and export performance; the study established the relationship between inflation and export performance and finally examined the relationship between Real Exchange Rate and export performance from 1989 to 2020. The study results imply that export performance is affected by inflation, FDI and real exchange rate. It was However implied that FDI and exchange reductions had positive implications for export performance while the occurrence of increases in inflation generally led to an export performance in Uganda. The study based on the findings concludes that the three factors are sufficient in determining the export performance for Uganda. The study contributes to knowledge in this field by assessing the degree and extent to which inflation, real exchange rate and FDI contribute to or affect export performance.

This is clearly the notion and in agreement with Douglas and North's Theory by Blazek and Uhlir (2002) who stated that export performance is generally enhanced in the factors studied. However, the following limitations were observed during the present study. There is an expected difficulty in collecting data since the rates of the factors affecting the export performance levels in Uganda may not be acquired with ease. The scattered nature of the information may not be attained and compiled with ease. Despite all the above-anticipated challenges, the researcher made efforts to adequately address them so as not to compromise the findings of the study in any way and so that the outcome reflects the majority view of the entire population. During this study we have learned that no single study is exhaustive enough to show the determinants of export performance, therefore; further research can be done on the impact of FDI on Uganda's total tax revenue or even the balance of trade and capital structure in Uganda for the period of the study.

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