

MAKERERE



UNIVERSITY

EXTERNAL DEBT BURDEN AND ECONOMIC GROWTH IN UGANDA (1985-2020)

BY

ABAASA ALLAN

2018/HD06/1118U

**A RESEARCH REPORT SUBMITTED TO THE FACULTY OF
ECONOMICS AND MANAGEMENT ARTS IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF ARTS
DEGREE IN ECONOMIC POLICY AND PLANNING
OF MAKERERE UNIVERSITY**

FEBRUARY, 2021

DECLARATION

I Abaasa Allan do hereby declare that this research report is my original work and has not been submitted to any other University for award of my degree.

Signature: *Abaasa*

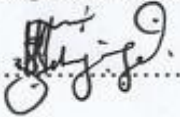
Date: 22nd - February - 2021

APPROVAL

This Research Report has been submitted for examination with my approval as University supervisor.

Dr. Sseruyange John (PhD)

Signature:.....



Date: 22-02-2021

DEDICATION

This Research Report is dedicated to my father Mr. Nuwagaba Geoffrey and my mother Mrs. Nuwagaba Annet.

ACKNOWLEDGEMENTS

I would like to take this opportunity to thank my supervisor Dr. Sseruyange John for all the guidance, supervision and non- ending support both in the course of this research and in class. May the Almighty reward you sir, abundantly.

I would also wish to extend my sincere gratitude towards my EPP classmates especially Atukunda Dorah, Walusimbi Joseph, Emoje Fiona, Ogal Denis and Kaganzi Medard for the great team work. Special appreciation goes to my family; Mr and Mrs Nuwagaba Geoffrey, my brothers Agaba Andrew, Ariho Arnold and Arinda Arthur for the patience and endurance.

I would like to thank Mr. Omega Jotham for the encouragement and motivation rendered towards my career and my workmates at National Medical Stores for their understanding, patience and solid encouragement all throughout the time I decided to pursue this course. Thank you so much, May God the Omnipotent and all-rewarding reward each one of you abundantly.

DECLARATION	i
APPROVAL	ii
DEDICATION	iii
ACKNOWLEDGEMENTS	iv
LIST OF ACRONYMS	Error! Bookmark not defined.
TABLE OF CONTENTS.....	Error! Bookmark not defined.
ABSTRACT.....	ix
CHAPTER ONE	1
INTRODUCTION	1
1.0 Introduction.....	1
1.1 Background of Study	1
1.2 Statement of the Problem.....	2
1.3 Purpose of the study.....	3
1.4 Specific Objectives	3
1.5 Research questions.....	3
1.6 Hypothesis.....	3
1.7 Scope of the Study	3
1.7.1 Geographic scope.....	3
1.7.2 Content Scope	4
1.7.3 Time Scope	4
1.8 Significance of the Study	4
1.9 Definition of key terms	5
CHAPTER TWO	6
LITERATURE REVIEW	6

2.0 Introduction.....	6
2.1 Theoretical review	6
2.2 Review of related literature.....	7
2.2.1 Effect of External debt stock on economic growth.....	7
2.2.2 Effect of External debt service payment on economic growth	8
2.3 Empirical Studies	9
2.4 Research gap	Error! Bookmark not defined.
CHAPTER THREE	18
METHODOLOGY	18
3.1 Introduction.....	18
3.2 Models Specification	18
3.3 Data Analysis Technique	19
3.3.1 Apriori Expectation.....	19
3.3.2 The Unit Root Test (Augmented Dickey Fuller Statistics Test)	20
3.3.3 Statistical Test (First Order).....	20
3.3.4 Econometric (Second Order) Test	21
3.4 Data Required And Sources.....	21
CHAPTER FOUR.....	23
DATA PRESENTATION, INTERPRETATION AND ANALYSIS	23
4.1 Unit Root Test Results	23
4.1.1 Residual Test for Cointegration	24
4.1.2 ECM Test Result.....	25
4.1.3 Regression Results	25
4.1.4 Interpretation of Regression Result.....	26
4.2 Evaluation of Result.....	27

4.2.1	Evaluation Based on Economic “a priori” Criteria	27
4.2.2	Evaluation Based On Statistical Criteria.....	28
4.2.2.1	R-squared: R^2 (Decision Rule).....	28
4.2.2.2	Student t-test	28
4.2.2.3	F-test:	29
4.2.3	Evaluation Based On Econometric Criteria	30
4.2.3.1	Test for Auto Correlation (Durbin Watson).....	30
4.2.3.2	Normality Test	30
4.2.3.3	Heteroscedasticity Test	31
4.3	Evaluation of Research Hypothesis	31
CHAPTER FIVE		32
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....		32
5.1	Summary of Findings.....	32
5.2	Conclusion	32
5.3	Recommendations.....	33
REFERENCES		34
APPENDIX I		39
Regression Data for The Effect of External Debt on Economic Growth of Uganda (1985-2020)		39

LIST OF TABLES

Table 4.1: Unit Root Test Results.....	23
Table 4.1.1: Residual Test Result.....	24
Table 4.1.2: ECM Test Result.....	25
Table 4.1.3: Regression Results	25
Table 4.2.1: Evaluation of Results	28
Table 4.2.2.2: Student t-test.....	29

ABSTRACT

The main objective of the study was to assess the impact external debt burden on economic growth in Uganda. Different from previous studies, in addition to being country specific, the study also uses a longer time series period. The study is an extension of the Barro (1990) in which he has interpreted external debt as an extended tool of the fiscal policy which has long term effect on economic growth. It adopts the Error Correlation Model (ECM) for analysis.

The results obtained from the analysis reveal that external debt has a significant negative effect on economic growth of Uganda. Inflation and Official Development Assistance were also found to have a significant negative effect on economic growth. These results were tested for robustness and none of the tests revealed any inconsistency or any of the common econometric problems associated with time series data.

Based on the results obtained the study recommended that government should expeditiously seek to implement structural reforms geared towards fiscal consolidation, debt management, public sector reform and tax reform which are necessary for economic expansion as well as for fiscal and debt sustainability. The study further recommends that government should opt for domestic alternatives like improving the quality and quantity of labor force in the country which will boost production and income there by expanding the tax base which will reduce reliance on external assistance especially external debt.

ABBREVIATIONS AND ACROYNMS

ADF	Augmented Dickey Fuller
BOU	Bank of Uganda
ECM	Error Correction Model
GDP	Gross Domestic Product
MDG	Millennium Development Goals
MoFPED	Ministry of Finance Planning and Economic Development
NDP	National Development Plan
OLS	Ordinary Least Squares
UBOS	Uganda Bureau of Statistics
VAR	Vector Auto Regression
VECM	Vector Error Correction Method
NPA	National Planning Authority
IMF	International Monetary Fund
IDA	International Development Association
HIPC	Heavily Indebted Poor Countries
INF	Inflation
EXR	Exchange rate
EXD	External Debt Stock

CHAPTER ONE

INTRODUCTION

1.0 Introduction

This chapter covers the background of the study, statement of the problem, objectives of the study, research questions, scope of the study, and significance of the study and the operational definitions of terms and concepts as applied to suit the context of the study.

1.1 Background of Study

External public debt is the total public and private debt owed to nonresidents repayable in foreign currency, goods or service (Adepoju et al., 2017). Government external debt is therefore the summation of current account deficit, increase in foreign exchange reserves and gross private short-term capital outflow less net long-term private capital inflow. However, defines external debt as that part of financial obligation in any national economy that is owed to a borrower outside the country; the borrowers can be a foreign country(s) International organizations and corporations or private households (Ayres & Warr, 2012).

Globally, it is generally expected that developing countries facing a scarcity of capital will acquire external debt to supplement domestic saving (Ajisafe et al., 2016). Besides, external borrowing is preferable to domestic debt because the interest rates charged by international financial institutions like International Monetary Funds (IMF) is about half to the one charged in the domestic market. However, whether or not external debt would be beneficial to the borrowing nation depends on whether the borrowed money is used in the productive segments of the economy or for consumption. Debt financed investment need to be productive and well managed enough to earn a rate of return higher than the cost of debt servicing (Aluko and Arowolo, 2016).

In Africa, the external debt levels of Sub-Saharan countries have been on the rise in the past two decades generating concerns among analysts and policy-makers about a looming debt distress threatening the region (Ayadi and Ayadi, 2018). While Africa's current external debt ratios appear manageable, the rapid growth in several countries is of concern. From a level of US\$176.36 billion in 1990, the total external debt stock for Sub-Saharan countries rose to US\$235.94 billion in 1995,

representing an increase from 58.2 per cent of the regional GDP to 72.0 per cent (Bank of Uganda, 2017). Despite recent tightening of concessionary terms associated with bilateral and multilateral loans, Sub-Saharan Africa countries still continue to rely heavily on external borrowing for fiscal sustainability in order to accelerate economic growth. The impacts of the global economic downturn in the 1980s on developing economies including the debt crisis was such that the 1980s is often referred to as the “lost decade” for Africa.

Uganda like many other developing countries has a long history of borrowing from both multilateral and bilateral countries. According to the BOU state of Economy reports for months, March, June and September, the trend of Uganda’s debt has been increasing since last received debt relief in the 1990s and early 2005 (BOU, 2018). Currently, the provisional total public debt stock (at the nominal value) at the end of May 2017 is estimated at Shs. 34.0 trillion, representing an increase of 14.1% as of June 2016 (BOU, 2017). In recognition of the need to address the debt burden of the low-income countries, international financial communities like the Paris club, creditors, non-Paris Club, bilateral and commercial creditor and multinational institution, Uganda qualified for the debt relief. Under this initiative, Uganda received an initial relief valued at US \$ 650 million in nominal value and an enhanced assistance valued at US \$ 1300 million in nominal value. The HIPC initiative contributed to the reduction of the burden of external debt service from 15.54% in 2004/05 to 13.1% in 2005/06 (BOU, 2019).

1.2 Statement of the Problem

Governments tend to borrow externally because such sources are highly concessional compared to domestic sources. Borensztein, (2010) admits that governments can monetize their debts by creating money to evade payment of interest. However, the huge external debt stock and debt service payments of African countries and Uganda in particular prevented the countries from embarking on larger volume of domestic investment which would have enhanced growth and development. External debt became a burden to Uganda because contracted loans were not optimally utilized therefore returns on investments were not adequate to meet maturing obligations and did not leave a favorable balance to support domestic economic growth. So, Ugandan economy has not performed well because the necessary macro-economic adjustment has remained elusive.

This far, the study empirically investigates the effect of external debt burden on the economic growth of Uganda.

1.3 General Objective

The general objective of this study is to investigate the relationship between External debt burden and economic growth of Uganda.

1.4 Specific Objectives

- i. To establish effect of External debt stock on economic growth of Uganda.
- ii. To determine the effect of External debt service payment on economic growth of Uganda.

1.5 Research questions

- i. What is the effect of External debt stock on economic growth of Uganda?
- ii. What is the effect of External debt service payment on economic growth of Uganda?

1.6 Hypothesis

The following hypotheses are tested in this study:

Ho: The external debt stock does not have an impact on the economic growth of Uganda.

H1: The external debt service payment does not affect economic growth of Uganda.

1.7 Scope of the Study

1.7.1 Geographic scope

The study was conducted in Uganda. Uganda is located in eastern Africa, west of Kenya, south of South Sudan, east of the Democratic Republic of the Congo, and north of Rwanda and Tanzania

1.7.2 Content Scope

This study focused on the effect of External debt stock on economic growth of Uganda and effect of External debt service payment on economic growth of Uganda.

1.7.3 Time Scope

This study used data from 1985-2020 because it was during this time gap when the economic growth of Uganda gradually declined with rising external debt burden. The researcher conducted this study in a period of 3 months that is from December 2020 to February 2021 because the process involved data gathering and editing.

1.8 Significance of the Study

This study provides alternative measures of tackling the external debt management problems. It serves as a tool in revamping government policies towards loan procurement and debt servicing in Uganda. This work may also serve as a yardstick for further research and documentation on Uganda's external debt crisis.

The study provides evidence that can increase awareness about External debt burden towards economic growth in Uganda and ensure that future project interventions are based on desired outcomes and impacts as outlined in the research report.

1.9 Definition of key terms

External debt

External debt is the portion of a country's debt that is borrowed from foreign lenders, including commercial banks, governments, or international financial institutions (Boyce, and Ndikumana, 2012). These loans, including interest, must usually be paid in the currency in which the loan was made

Economic Growth

Economic growth can be defined as the increase in the inflation-adjusted market value of the goods and services produced by an economy over time (Cecchetti et al., 2010). Statisticians conventionally measure such growth as the percent rate of increase in real gross domestic product, or real GDP.

External debt stock

This refers to the portion of a country's debt that was borrowed from foreign lenders including commercial banks, governments or international financial institutions (Chipalkatti and Rishi, 2011). These loans, including interest, must usually be paid in the currency in which the loan was made. In order to earn the needed currency, the borrowing country may sell and export goods to the lender's country.

External debt service payment

External Debt Service Payment means, when used with respect to any Payment Date, the sum of the (a) interest, if any, and (b) Principal Installments, if any, and (c) Auxiliary Obligations, if any, due and payable on such date with respect to the Bonds and Auxiliary Agreements referred to (Chongo, 2013).

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This section focuses on theoretical review, review of related literature and research gap.

2.1 Theoretical review

For a country to finance its activities a country has a number of options of raising the funds. It can make use of the internal sources such as taxes and fees or it can borrow if the internal source is not enough to finance the budget deficit. Economic theory is a better explanation of the reason for opting for external finance as opposed to domestic financing in financing the sustainable development (Clements et al., 2013). According to the theory in developing countries the level of domestic savings is not sufficient to finance the needed investment to ensure economic development; since investment is a function of savings it is logical to require the use of complementary external goods and services. However, the relationship between domestic savings and foreign funds gives a guide as to how a country can borrow abroad (ibid). Also since most of LDCs are far from their steady state growth any investment injection could lead then to have accelerated economic growth (Cohen, 2013).

Uganda is characterized by inadequate internal capital formation arising from the vicious circle of low productivity, low income, and low savings. This scenario calls for technical, managerial and financial support from abroad to bridge the resources gap (Dasgupta, 2010). The accesses to external finance strongly influence the economic development process of nations. It is an important resource needed to support sustainable economic growth.

Ordinarily, economic growth should depend largely on domestic capital formation and accumulation, but due to severe limitations it requires imports of capital goods and complementary raw materials that are not domestically available (Hameed et al., 2018). These foreign imports are necessary for various reasons. Balanced growth calls for substantial investment in infrastructures – roads, ports, dams, transportations and so on. Foreign debt is needed to cover two types of gaps in the developing process. They include; (a). The foreign exchange gap which is the payment of

deficit a country faces when it has reduced its external reserves to a minimum compared with projected import requirements. (b) The investment –saving gap which is the foreign capital needed to supplement domestic savings for financing real investment levels. External financial supports, when used productively accelerate the pace of economic development (Hassan and Akhter, 2012). It will not only provide foreign capital but will also give managerial know-how, technology, technical expertise as well as access to foreign markets for the mobilization of a nation's human and material resources for development purposes. Specifically, loans can be used in areas such as increasing agricultural production of goods for export, mineral exploration, industrialization, transport and communication, rural and urban development, health care services, balance of payments, tourism, infrastructural development, etc.

2.2 Empirical literature

2.2.1 Effect of External debt stock on economic growth

Kumar & Woo, (2010) studied the impact of external debt stock on economic growth in Nigeria. The variance decomposition and impulse response from Vector Auto-Regression (VAR) was the econometric technique used to test whether or not Ratio of External debt to Exports and other economic control variables stimulate economic growth. Based on the two-stage data processing, the result revealed weak causation between external debt and economic growth in the Nigerian context.

MoFPED, (2017) studied the long-run and short-run relationship between external debt stocks and macroeconomic performance of Pakistan. They applied time-series econometric techniques with annual data series for the entire period of 1988-2008. The co-integration approach was employed to investigate the long-run relationship, and vector error correction method (VECM) to investigate the short term dynamics. The study found that there were a significant long run and short-run relationship between external debt and macroeconomics variables performance.

Modigliani, (2011) investigated the effect of external debt stock on economic growth in Ghana using GDP as the dependent variable while the ratio of external debt to export, inflation and exchange rate were used as the independent variables. Annual time series data covering the period of 1970 to 2010 were used, which were analysed using the ordinary least squares, ADF, unit root

test, Johansen co-integration test and Vector Error correction model (VECM). Results from the study showed that external debt has a positive impact on the Nigerian economy in the long run. They, therefore, recommended that external borrowing should be obtained for economic growth reasons rather than social and political motives (Muinga, 2014).

From the foregoing empirical studies, it is evident that the literature on external debt and economic growth is replete with its divergent results (NPA, 2010). Divergence observed in these results suggests differences in theoretical and methodological approaches employed and the different contexts studied. The kind of the relationship between external debt stock and economic growth in the Somali context is subject to empirical investigation, such inquiry is what this study is set to achieve and to find out if this study will corroborate any of the above outcomes.

In 2005-2015, the external debt stock grew most rapidly in Mozambique (average by, 30 percent per year), Cameroon (26 percent per year) and Gabon, Nigeria, Rwanda and Seychelles (24 percent per year each) (Ochieng et al., 2014). The concessional share of total external debt was less than 50 percent on the average in only seven of the heavily indebted poor countries in Africa, namely Côte d'Ivoire (27 percent), Zambia (39 percent), the Sudan (40 percent), Liberia (40 percent), the Central African Republic (43 percent), Ghana (45 percent) and the Democratic Republic of the Congo (48 percent).

2.2.2 Effect of External debt service payment on economic growth

Different empirical studies are carried out since the onset of the debt crisis in the early 1980's. The main objective of these studies centered mainly on the effect of external debt on investment and or economic growth. The result from the studies showed both positive and negative effects of external debt on investment and economic growth. Some of these studies are stated below chronologically. Okwonkwo, et al., (2013) attempted to found the cost of foreign debt on the Turkish economy by adopting a computable general equilibrium model. He tried to explain the concept of debt overhang using a multi sector, non-linear general equilibrium model by evaluating two debt overhang measures. The two debt overhang measures are set by Sachs (1986) and Feldstein (1986) independently

According to Oryema, (2019), when indebted countries faced a high debt service payment, they are forced to levy a tax on the private sector, with the aim of transferring resources to the public sector. Due to an increase in tax, return from investment decrease on the private sector. As a result, overall investment will decrease. For

According to Feldstein, (1986) A debt payment also needs a transferring of resources to foreign exchange. After using these two measures on the Turkish economy; Bauerfreund found a negative effect of external debt payment on investment in 1985. He also pointed out poor internal and external economic policies as the main causes for the debt overhang problem. Oxfam (2016) attempted to find the statistical relationship between foreign debt and Productivity on 55 developing countries that faced debt service problem. They categorized the 55 countries into four based on per capita income and the level of debt. 14 out of the 55 countries are categorized in one group as indebted middle-income countries, as moderately indebted low-income countries, as severely indebted middle-income countries and the rest as indebted low-income countries.

2.3 Empirical Studies

There have been several attempts to empirically assess the external debt-economic growth link - the debt overhang and crowding out effects - mainly by using ordinary least square (OLS). Most of the empirical studies include a fairly standard set of domestic debt policy and other exogenous explanatory variables. The majority find one or more debt variables to be significantly and negatively correlated with investment or growth (depending on the focus of the study).

Pattillo, et al., (2014) opined that too much of external debt could dampen growth by hampering investment and productivity growth because of the fact that when greater percentages of reserves (foreign currency) are consumed in meeting debt service, exchange rates fall and creditworthiness erodes; causing reduction in access to external financial resources.

Reinhart, and Rogoff, (2013) noted that the inability of many SSA countries to meet their social needs and escape from debt is, to a large extent, a result of the fact that the borrowed funds have not been used productively. Instead of financing domestic investment or consumption, a substantial fraction of the borrowed funds was captured by African political elites and channeled abroad in the form of capital flight, they revealed. They argued that in order to prevent diversion

of borrowed fund through capital flight, there is need for greater accountability on the creditor side as well as the establishment of mechanisms of transparency and accountability in the debtor countries' own decision-making processes with regard to foreign borrowing and the management of borrowed funds.

Ricardo, (2011) noted that Sub Sahara Africa countries were plagued by their heavy external debt burden. He argued that the debt crisis, compounded by massive poverty and structural weaknesses of most of the economies of these countries made the attainment of rapid and sustainable growth and development difficult. It then became widely accepted that the heavily-indebted countries require debt relief initiatives beyond mere rescheduling to have a turn-around in their economic performance and fight against poverty.

Ricardo, (2012) opined that completion point countries will continue to face a dilemma given their large priority financing needs for development on the one hand, and the need to maintain long-term debt sustainability on the other. To achieve debt sustainability, he advised that they should maintain macroeconomic stability and deepen reforms to improve policy and institutional frameworks, strengthen debt management, mobilize domestic revenues, and create an environment conducive to attracting foreign direct investment and diversifying exports. He concluded that the mix between debt and grant financing must be closely monitored by both borrowers and creditors to ensure that the potentially large financing needs associated with meeting the Millennium Development Goals do not give rise to a renewed excessive buildup of debt.

Sachs, (2014) argued that debt obligations can be eased temporarily by rescheduling. He however, noted that African countries that are undergoing external debt crisis may improve their situation by: liberalizing their economies in order to bring competitive pressures on domestic private business activities, adjusting the exchange rate so that exports are encouraged and imports are restrained, and reducing inflation through strong policies of fiscal and monetary adjustment. He concluded that because of the structural difficulties facing most African countries, a comprehensive policy package for managing external debt has to aim at addressing not only demand management issues, but also the structural problems (Saint–Paul, 2012).

The major challenge faced by the debt management office is ensuring that a reasonable level of resources is earmarked for debt servicing to avoid the risk of default and to maintain conducive

relations for debt relief negotiations with the creditors. The debts are not subject to debt relief or rescheduling and in case of default, they carry stiff consequences with sanctions coming 30 days after due date. The implications for default include. Prohibition of borrower/guarantor from signing new loan or guarantee agreement with the background. Suspension of disbursement in respect of all Bank group loans granted to the borrower/guarantor and lastly (Smith, 2016). Suspension of the granting of any new loans by the Bank group to the borrower/guarantor. The impositions of the above sanctions adversely affect the credit – worthiness of a Country as well as access to further foreign credits or loans. It is therefore to be avoided by all means.

Debt Rescheduling involves the postponement, extension and re-orderings of the repayment of the existing debt. An agreement between creditors (government authorities and the commercial banks acting as a group) and the debtor to roll over payment due to the former from the later over a certain period and under new terms and conditions falls under either debt rescheduling or refinancing. This involves the provision of new money to replace maturing debt (Solow, 2014). The four elements of loan restructuring are: Rescheduling of the principal of a part or all of an existing loan by postponing repayment i.e. rearranging maturities and grace periods involves the rescheduling of the interest payments. Refinancing of an existing loan by raising fresh or complementary fund to meet existing obligation that is making provision for new credit's with proceeds to be used to repay outstanding loans; Restoring of trade –related bank credit lines; and Persuading the financial community to restore inter-banks lines of credit to a certain minimum level.

However, Uganda's debts, like that of most other developing countries, appeared to be on a ceaseless and perpetual increase. The more we paid, the more it seems we owe. Doubtful deals, dud projects (white elephants) and dubious debts; Uganda was neck-deep in the debt trap. Debt became a burden on Uganda's neck, jeopardized her economic growth; undermined the capital market development and compromised her social development (Solow, 2014). The country spent a lion's share of her national income servicing debts leaving little money for social services and infrastructural developments, and even still much less for investment. In the process, we have paid more than we originally borrowed, yet our debt – like a cruel virus – continues to multiply.

Adepoju et al; (2017) further noted that a huge external debt without servicing as it was the case for Uganda before year 2000 constituted a major impediment to the revitalization of her shattered

economy as well as the alleviation of debilitating poverty. They revealed that the much needed inflow of foreign resources for investment stimulation, growth and employment were hampered because without credit cover, Ugandan importers were required to provide 100 percent cash covers for all orders and this therefore placed them to a competitive disadvantage compared to their counterparts elsewhere.

Various studies have been carried out on the issue of the impact of external debt on economic growth across the world. In the recent publication (MoFPED, 2017) reported that under the most extreme stress scenario, there was a breach of the Present Value (PV) of debt to-exports ratio in a debt sustainability analysis that was conducted. The report further stated that exports were a significant cause of concern for external debt sustainability. If exports are not enhanced, the country could face a debt liquidity problem. In addition, the report showed that Uganda's debt was still sustainable, however the countries levels of debt moved from low to moderate risk of debt distress. This could affect the level of investments and foreign inflows into the country. Apart from the effect of high debt stock on investment, external debt can also affect growth through accumulated debt service payments which are likely to "crowd out" investment (private or public) in the economy (Clement et al., 2013). This reduces the resources that can be used domestically.

Tayo, (2013) opined that the impact of debt servicing of growth is damaging as a result of debt-induced liquidity constraints which reduces government expenditure in the economy. These liquidity constraints arise as a result of debt service requirements which shift the focus from developing the domestic economy to 11 repayments of the debt. Public expenditure on social infrastructure is reduced substantially and this affects the level of public investment in the economy. In the Uganda's budget for financial year 2016/2017, the estimated interest payable public debt was UGX 2.0 trillion, about 10% of the total budget allocations and the third largest among budget sectors (MoFPED, FY 2016/17). This could have economic growth implications since a lot of funds were allocated to debt servicing.

Agenor and Montiel, (2016) stipulated that the approach to external debt is motivated by many observations. The principal argument is the policy-oriented discussion that the debt problem is premised on the question of whether the debt crisis is one of solvency or of liquidity problem. Liquidity problem is when a country is unable to service its debts. This implies that absence of

liquidity is when a country lacks enough cash at hand to pay current debt. Solvency relates to whether the value of a country's liabilities exceeds the ability to pay at any time.

Ajayi, (2011) says “a country is insolvent when it is incapable of servicing its debt in the long run”. The International Monetary Fund (IMF) and the International Development Association (IDA) agreed to support a debt reduction package for Uganda under the enhanced Heavily Indebted Poor Countries (HIPC) Initiative). This was after a huge increase in Uganda’s external debt level for over decades due to arrears accumulation as a result of successive governments defaulting on debt obligations, deteriorating terms of trade, expansionary fiscal policies and heavy borrowing for economic recovery and stabilization programs. In 2016, UDN reported that public debt was on a rise which could result into a debt overhang problem. External debt does not automatically transform into debt burden when funds are optimally utilized. In an optimal condition, the marginal return on investment is greater than or equal to the cost of borrowing.

According to Edelman (2013), the critical factors affecting debt service capacity are returns on investment, the cost of borrowing, and the rate of savings. He added that the benefits of external borrowing have been emphasized in the literature to the neglect of the costs. Ubok-Udom (2018), enumerates the costs of external borrowing to include debt service burden which incorporates costs implied by the term structure of external loans, costs of resultant liquidity crisis, costs of the viciously cumulative debt, the manageability of the debt, costs of debt rescheduling, and costs of import substitution among others.

Ayadi and Ayadi, (2018) examined the impact of external debt on the economic growth of the Nigerian and South African economies using annual data on real GDP, external debt stock, fixed capital stock and terms of trade and found evidence of a negative relationship between external debt and economic growth for South Africa and a positive external debt contribution to growth up to a certain point for Nigeria. They however failed to establish the threshold level of external debt in Nigeria. Debi et al., (2013) also used ARDL model to determine the impact of Public debt on economic growth and found that domestic and external debt had a negative impact on economic growth in India. In addition, they revealed that debt service payment and exports had a positive and significant effect on economic growth.

Clement et al., (2013) also argued that external debt can encourage investment up to a certain point where the debt overhang begins and the ability of investors to provide capital starts to deteriorate. They analyzed the channels through which external debt impacts economic growth in low-income countries by estimating a reduced form growth equation for low income countries for the period of 1970 to 1999, using both fixed effects and system generalized method of moments. However, Adegbite et al. (2018) attempted to investigate the external debt-growth relationship using a non-linear model, and found an insignificant relationship between external debt and economic growth in both developing and industrial countries.

Colaco, (2015) explained debt service vulnerability in developing countries using three contexts as follows. First, the size of external loans has reached a level that is much larger than equity finance, resulting in an imbalance between debt and equity. Secondly, the proportion of debt at floating interest rates has risen dramatically, so borrowers are hit directly when interest rates rise. Thirdly, maturities have shortened considerably in large, partly because of the declining share of official flows.

Mehran, (2016) argues that adequate debt management is essential in an increasingly complex financial environment and identified the critical components of debt management as policy coordination, regulatory environment, accounting, and statistical analysis. This is true since the effectiveness of measures to reach a balanced level of debt supportive of development, depends on the debtor nation adopting fiscal adjustment and structural reform. Other features are transparency and anticorruption policies, creation and/or improvement of debt management structures, and decision-making processes among others.

Ezeabasili, (2011) applied a granger causality test using Nigerian external debt data and found a negative relationship between economic growth and the level of external debt in Nigeria. Furthermore, the Pairwise Granger Causality test results revealed uni-directional causality between external debt service payment and economic growth at 10 percent level of significance. External debt was found to Granger cause external debt service payment at the 1 percent level of significance.

Audu, (2014) examined the impact of external debt on economic growth and public investment in Nigeria and found that debt service trouble prevents rapid economic growth and worsens the social

issues. This increased uncertainty in the Nigerian economy which impeded foreign investors and also reduced the level of private investment in the economy. Debt acquisition and management determines the level of sustainability of public debt.

Ajayi and Khan, (2010) reported that sustainable foreign borrowing is measured by several ratios, such as debt stock to export, debt service to export, public debt to GDP (or GNP), and external debt to Gross National Income (GNI) among others. However, the determination of the sustainable level of these ratios is indeterminable and their usefulness is reduced to a warning of potential explosive growth in the stock of foreign debt. For instance, if the acquisition of additional foreign debt increases the debt servicing burden more than it increases the country's capacity to bear the burden, such an acquisition becomes undesirable and the situation must be reversed through export expansion. If export is not expanded, more borrowing will be necessitated for servicing debt and external debt will pile up above the country's capacity to bear.

Adepoju et al., (2017) revealed that Nigeria's huge debt burden has negative effects for the economy. This was through the servicing of external debt had gravely encroached upon resources availability for socioeconomic development and poverty alleviation. Jonse, (2002) analyzed the impact of external debt and economic growth in Ethiopia, and noted that though the indebted developing countries have been able to pay, the willingness to pay decreases for a number of reasons like fiscal irresponsibility, exchange rate misalignment among others. In Uganda the cost of debt serving has been increasing overtime. As a percentage of Uganda's government total expenditure, interest payments were 13.8 % in FY2016/17. This compares with 10.2 % in FY 2015/16 (MoFPED, 2017). Choong et al; (2010) investigated the impact of external debt on the economic growth in Malaysia during the period 1970 – 2006. Using Co-integration test, the findings revealed that all components of debts have a negative effect on long run economic growth. In addition, the Granger causality test showed the existence of short-run causality linkages between external debt and economic growth.

Also, Malik et al; (2010) examined the effect of external debt and economic growth in Pakistan for the period between 1972–2005, through the application of time series econometric technique, they found out that the relationship between external debt and economic growth was significant and negative, meaning that an increase in external debt leads to reduction in economic growth.

Hameed et al., (2018) analyzed the long run and short run relationships between external debt and economic growth in Pakistan using annual time series data from the period of 1970 to 2003. They investigated the dynamic effect of debt stock, debt service, capital stock and labor force on economic growth and concluded that debt servicing burden had an adverse effect on the productivity of labor and capital, hence negatively affecting economic growth.

Edo, (2012) analyzed the African external debt problem with reference to Nigeria and Morocco and concluded that external debt has affected investment severely. His other findings included the fact that fiscal expenditure, balance of payments, and global interest rates are major factors explaining debt accumulation in the studied countries. He, therefore, suggests measures that could alleviate the above problems which included; privatization, sustained export promotion program, restructuring and development of capital markets, among others.

Karogol, (2012) investigated both the short-run and long-run relationships between economic growth and external debt service for Turkey during 1956 – 1996. The study employed a standard production function model which analyzed data using multivariate co-integration techniques. The Vector Auto regression estimates showed that there exists one Co-integration equation. It also revealed that debt service is negatively related to economic growth in the long-run. The causality test showed uni-directional causality between debt service and economic growth.

Clements et al., (2013) examined the channels through which external debt affects growth in low income countries. Their results suggested that the substantial reduction in the stock of external debt projected for Highly Indebted Poor Countries (HIPC) would directly increase per capita income growth by about 1 percentage point per annum. They also added that reductions in external debt service could also provide an indirect boost to economic growth through their effects on public investment.

Oryema, (2019) applied a panel data estimation technique to investigate the effect of external debt in Sub-Saharan Africa from 1990 to 2005 and found a negative statistically significant relationship between external debt and economic growth; he however found that external debt service had insignificant effects on economic growth. He further concluded that debt overhang was the main channel through which external debt negatively affects economic growth in Sub-Saharan Africa. Kosimbei, (2015) also investigated the impact of external debt on the economic growth in East

African Community for the period of 1990 – 2013, using the random effects model, the findings showed a significant negative effect of external debt on economic growth.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The choice of model for this research is the Ordinary Least Squares because it provides satisfactory results for estimates of structural parameters (Koutsoyiannis, 1977:43). This method involves decision on whether the parameters are statistically significant and theoretically meaningful. It also verifies the validity of estimates and whether they actually represent economic theory. In order to achieve a comprehensive analysis, the two major components of external debt management: external debt stock and debt service payment were employed. The real Gross Domestic Product was used in the regression analysis because it is to some degree free of the effect of inflation.

3.2 Models Specification

The models to investigate the impact of external debt on the economic growth of Uganda are stated below with the dependent variable as real Gross Domestic Product while the explanatory variables are External debt stock, Inflation rate, Exchange rate, External debt service payment, Government expenditure and Interest rate.

MODEL I

$$\text{loggdp} = a_0 + a_1\text{EXD} + a_2\text{INF} + a_3\text{EXR} + e$$

Where loggdp - Gross Domestic
Product

EXD - External debt stock

INF - Inflation

EXR - Exchange rate

a_0, a_1, a_2 and a_3 - Parameters

e - Error term

MODEL II

$$\text{loggdp} = b_0 + b_1\text{EDS} + b_2\text{GEX} + b_3\text{INT} + e$$

Where loggdp - Real Gross Domestic Product

EDS - External debt service payment

GEX - Government expenditure

INT - Average interest rate

b_0, b_1, b_2 and b_3 - Parameters

E - Error term

3.3 Data Analysis Technique

Time series analysis is used. This approach, which is quantitative technique includes table and the test for the hypotheses formulated by using the Augmented Dickey Fuller Test (Unit Root), Error Cointegration Model (ECM) and Regression analysis at 5% level of significance.

3.3.1 Apriori Expectation

Economic Criteria

The economic prior test shall be conducted to enable us examine the magnitude and size of the parameters estimate. This evaluation is guided by economic theory to ascertain if the parameter estimate conforms to expectation.

MODEL I

$$\text{gdp} = a_0 + a_1 \text{EXD} + a_2 \text{INF} + a_3 \text{EXR}$$
 Where
 a_0, a_1, a_2 and a_3 are parameters $a_0 > 0$, $a_1 < 0$, $a_2 < 0$ and $a_3 > 0$

MODEL II

$$\text{gdp} = b_0 + b_1 \text{EDS} + b_2 \text{GEX} + b_3 \text{INT} + e$$

Where b_0, b_1, b_2 and b_3 are parameters $b_0 > 0$, $b_1 < 0$, $b_2 > 0$ and $b_3 < 0$

3.3.2 The Unit Root Test (Augmented Dickey Fuller Statistics Test)

The augmented Dickey–Fuller (ADF) statistic, used in the test, is a negative number. We consider the ADF in absolute terms. The essence of Unit Root is to check if the variables are stationary (if they do not change over a period of time) and reliable for forecasting. If all variables are of the same order, we run a cointegration test. The result of the ADF shows if the variable is stationary or not.

Decision Rule

$H_0: \Theta = 0, a_i = 1$ (presence of unit root, the data is non-stationary)

$H_1: \Theta < 0, a_i \neq 1$ (the data is stationary and does not need to be differenced) If the ADF test statistics value is greater than the critical value in absolute terms at 5% level of significance, we reject H_0 and accept H_1 . This means that there is no unit root and the data is stationary.

3.3.3 Statistical Test (First Order)

Under the statistical test, we will test for the goodness of fit, the individual significance of each regressor using the t-test and finally the significance of the regression models using the f-test.

- (i) **Goodness of fit test:** We shall make use of the coefficient of multiple determination R^2 to find how the variations in the explanatory variable effect the dependent variable.

- (ii) **Student's t-test:** It is used for testing the significance of each variable. We shall make use of 5% level of significance with $(n-k)$ degrees of freedom and where necessary, the probability value will be used as rule of thumb.
- (iii) **The f-test:** It will be used for testing the overall significance of the regression models. In order words, it will be used to test the joint impact of the independent variables on the dependent variable.

3.3.4 Econometric (Second Order) Test

Econometric test will be used for empirical verification of the model. This will range from testing for autocorrelation, normality and heteroscedasticity.

- (i) **Autocorrelation:** The classical linear regression model assumes that autocorrelation does not exist among the disturbance terms. In order to find out where the error terms are correlated in the regression, we will use the Durbin Watson Statistics.

Durbin Watson's Statistics

This is used to test for the presence of serial autocorrelation. This means that the serial dependence of successive error terms in the regression.

- (ii) **Normality Test:** This test will be conducted to find out if the error terms are normally distributed with zero mean and constant variance. This is one of the assumptions of the classical linear regression model. The Jargue Bera test will be used to test for the normality in the time series variables used.
- (iii) **Heteroscedasticity test:** Heteroscedasticity occurs when the variance of the error is not constant.

3.4 Data Required and Sources

Secondary data shall be the basis of data to be used in this study. It shall be sourced mainly from the publications of the Bank of Uganda such as BOU Statistical Bulletin and BOU Annual Reports and Statement of Accounts; as well as the publications of Ministry of Finance and Economic

Development, Department of Debt Management, and Uganda Bureau of Statistics (UBOS) etc. The variables for which data were sourced include: External debt stock, Inflation rate, Exchange rate, Gross Domestic Product, External Debt Servicing, Government Expenditure, and Interest rate for the period 1985 to 2020.

CHAPTER FOUR

DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.1 Unit Root Test Results

MODEL I

VARIABLE	ADF STATISTIC LEVEL FORM	CRITICAL VALUE @ 5%	LAG LENGTH	ADF STATISTIC 1ST DIFFERENCE	CRITICAL VALUE @ 5%	LAG LENGTH	ORDER OF INTEGRATION
RGDP	1.708094	2.9750	2	5.505377	2.9665	2	1(1)
EXD	2.217963	2.9705	1	3.622060	2.9750	2	1(1)
INF	2.163648	2.9750	2	4.430918	2.9798	2	1(1)
EXR	0.239497	2.9705	1	3.590337	2.9750	2	1(1)

MODEL II

VARIABLE	ADF STATISTIC LEVEL FORM	CRITICAL VALUE @ 5%	LAG LENGTH	ADF STATISTIC 1ST DIFFERENCE	CRITICAL VALUE @ 5%	LAG LENGTH	ORDER OF INTEGRATION
RGDP	1.708094	2.9750	2	5.505377	2.9665	2	1(1)
EDS	2.105628	2.9750	2	3.931870	2.9798	2	1(1)
GEX	3.500388	3.5867	2	3.429161	2.9750	1	1(1)
INT	2.413059	2.9705	1	5.826977	2.9750	1	1(1)

The result of all the ADF test statistics show that these variables are not stationary in their level form but were stationary after the first difference. The necessary but insufficient condition for cointegration is that the variables be integrated of the same order. Since all the variables are integrated of order 1, this implies evidence of cointegration between them.

4.1.1 Residual Test for Cointegration

We use Engle & Grenger cointegration procedure by generating the residuals and test the order of integration of the residual. Mathematically the residual is derived thus:

$$Y = a_0 + a_1X_1 + a_2X_2 + a_3X_3 + U_i$$

$$U_i = Y - a_0 - a_1X_1 - a_2X_2 - a_3X_3$$

Where U_i = residual

Decision Rule (U_i)

If the ADF statistics of the residual > critical value at level form, we conclude that there is a cointegration between the dependent variable and the independent variables in the models.

RESIDUAL TEST RESULT

VARIABLE	ADF TEST STATISTIC	CRITICAL VALUE @ 5%
RESIDUAL 01	3.209717	2.9705
RESIDUAL 02	3.767747	2.9705

Since the ADF test statistic > critical value @ 5% in both models 1 & 2, this implies that there exists a long run relationship between the variables. We therefore estimate the ECM (Error Correction Model):

4.1.2 ECM Test Result

VARIABLE	COEFFICIENT
RESIDUAL 01(-1)	-0.206170
RESIDUAL 02(-1)	-0.929799

The coefficient of ECM in model 1 is -0.206 implying that 20.6% of the disequilibrium in the model is corrected every year.

In model 2, the coefficient of ECM is -0.9298 implying that 92.98% of the disequilibrium in the model is corrected every year. These results suggest that the speed of adjustment is higher in model two than in model one.

4.1.3 Regression Results

MODEL 1

VARIABLE	COEFFICIENT	STANDARD ERROR	t-Statistic	P- VALUE
CONSTANT	12.27120	0.053292	230.2626	0.0000
EXD	-9.41E-08	2.29E-08	-4.101033	0.0004
INF	0.001453	0.001399	1.039014	0.3084
EXR	0.008634	0.000594	14.54193	0.0000

$$R^2 = 0.916292$$

$$\bar{R}^2 = 0.906633$$

$$F = 94.86724$$

$$DW = 1.832744$$

MODEL II

VARIABLE	COEFFICIENT	STANDARD ERROR	t-Statistic	P- Value
CONSTANT	177097.2	19262.94	9.193679	0.0000
EDS	0.092692	0.024757	3.744154	0.0009
GEX	0.140861	0.005448	25.85625	0.0000
INT	2729.815	965.9784	2.825959	0.0089

$$R^2 = 0.970023$$

$$\bar{R}^2 = 0.966564$$

$$F = 280.4398$$

$$DW = 1.587174$$

4.1.4 Interpretation of Regression Result

MODEL I

If $P < 0.05$, the variable is significant or otherwise. The above result in terms of coefficients and probabilities of the regression can be interpreted as follows;

The intercept is 12.27120. This shows that if all explanatory variables were held constant, GDP will be 12.27120 all things being equal.

The coefficient of external debt stock is $-9.41E-08$ and $P=0.0004$. This indicates that debt stock is negatively related to GDP (a unit increase in external debt stock will reduce GDP by $9.41E-08$) and its impact on growth is significant.

The coefficient of inflation is 0.001453 and $P=0.3084$. This indicates that inflation rate is positively related to GDP (a unit increase in GDP is followed by an increase in inflation by 0.001453) though it has no significant impact on growth.

The coefficient of exchange rate is 0.008634 and $P=0.0000$. This indicates that, exchange rate is positively related to GDP (a unit change in exchange rate will change GDP by 0.008634) and that it exerts a significant impact on growth.

MODEL II

The intercept is 177097.2. This shows that if all explanatory variables were held constant, GDP will be 177097.2 all things being equal.

The coefficient of external debt service is 0.092692 and $P=0.0009$. This indicates that external debt service is positively related to GDP (a unit increase in debt service will improve GDP by 0.092692) and it has significant impact on growth.

The coefficient of government expenditure is 0.140861 and $P=0.0000$. This indicates that government expenditure is positively related to GDP (a unit increase in government expenditure will increase GDP by 0.140861) and it has significant impact on growth.

The coefficient of interest rate is 2729.815 and $P=0.0089$. This indicates that interest rate is positively related to GDP (a unit change in interest rate will change GDP by 2729.815) and it has significant impact on growth.

Clement et al., (2003), found that external debt stock of public debt does not depress public investment but debt service does. This result contradicts their finding.

4.2 Evaluation of Result

4.2.1 Evaluation Based on Economic “a priori” Criteria

This test is carried to ascertain if the parameter estimates conform with what economic theory states in terms of sign and magnitude. The test is summarized in the table below;

EVALUATION RESULTS

VARIABLE	EXPECTED SIGN	OBSERVED SIGN	CONCLUSION
EXD	NEGATIVE	NEGATIVE	CONFORMS
INF	NEGATIVE	POSITIVE	DOES NOT
EXR	POSITIVE	POSITIVE	CONFORMS
EDS	NEGATIVE	POSITIVE	DOES NOT
GEX	POSITIVE	POSITIVE	CONFORMS
INT	NEGATIVE	POSITIVE	DOES NOT

Muoghalu et al., (2007) found that a positive association exists between external debt stock and investment burdens. This also conforms to the result of the “a priori” test.

4.2.2 Evaluation Based On Statistical Criteria

4.2.2.1 R-squared: R^2 (Decision Rule)

The higher the value of R^2 , the higher the percentage of variation of the dependent variable, the better the R^2 of the regression plane to the sample observation while if closer to zero, the goodness of fit becomes worse. The value of R^2 lies between 0 and 1, therefore the closer the value to 0 or 1, it becomes worse or better respectively.

In model 1 and 2, the R^2 is 0.916292 and 0.970023 respectively. This indicates that the independent variables explain the variation in GDP in the tune of 91.63% and 97% respectively. That is 91.63% and 97% of the variations in GDP is explained by the exogenous variables in model 1 and 2.

4.2.2.2 Student t-test

To test the individual significance of the explanatory variables, we make use of ttest. It follows t-distribution with n-k degrees of freedom.

Test for Hypothesis

Ho: $\beta_i=0$ (The parameter is statistically insignificant)

Hi: $\beta_i \neq 0$ (The parameter is statistically significant)

@ 5% level of significance

Decision Rule

Reject Ho if $t\text{-cal} > t\text{-tab}$ otherwise accept Ho. $t\text{-tab} = 1.706$

VARIABLE	t-statistic	t-tab	CONCLUSION
EXD	4.101033	1.706	SIGNIFICANT
EDS	3.744154	1.706	SIGNIFICANT

4.2.2.3 F-test:

The F-test is used to test the overall significance of the models. It is carried out under the following hypothesis;

Ho: $\beta_0 = \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$ (The model is insignificant)

H1: $\beta_0 \neq \beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq 0$ (The model is significant)

The theoretical F-value (F-tab) under 5% level of significance with $V_1 = 3$ and

$V_2 = 26$ is 2.99

Decision Rule

Reject Ho if $F\text{-cal} > F\text{-tab}$ otherwise accept Ho. In model 1:

$F\text{-cal} = 94.86724$ therefore Model 1 is significant

Whereas in model 2:

$F\text{-cal}=280.4398$ (Model 2 is significant)

We therefore reject H_0 since $F\text{-cal}>F\text{-tab}$ in both models and conclude that the models are significant.

4.2.3 Evaluation Based On Econometric Criteria

4.2.3.1 Test for Auto Correlation (Durbin Watson)

Decision Rule

If $D=2$, we accept that there's no autocorrelation among the variables.

If however, $0<D<2$, there's positive autocorrelation among the variables.

If $2<D<4$, there's negative autocorrelation among the variables.

The computed D (Durbin Watson) is 1.832744 and 1.587174 in Model I and II respectively, which reveals to us that there is positive autocorrelation between the Gross Domestic Product, external debt stock, inflation, exchange rate, external debt service, government expenditure and interest rate in Uganda.

4.2.3.2 Normality Test

Test Hypothesis:

H_0 : U_i = normally distributed

H_1 : $U_i \neq$ normally distributed

Decision Rule

Reject H_0 if probability of JarqueBera, $P<0.05$

From the result, the Jarque Bera coefficient is 0.599383 and its probability is 0.741047>0.05. We cannot reject the null hypothesis because $P>0.05$, therefore we conclude that the error term follows normal distribution.

4.2.3.3 Heteroscedasticity Test

Heteroscedasticity occurs when the variance of the error term is not constant. The test contains the following hypothesis:

Ho: $\sigma_0^2 = \sigma_1^2 = \sigma_2^2 = \sigma_3^2 = 0$ (Homoscedasticity), the variance is constant.

H1: $\sigma_0^2 \neq \sigma_1^2 \neq \sigma_2^2 \neq \sigma_3^2 \neq 0$ (Heteroscedasticity), the variance is not constant.

Reject Ho if $P<0.05$

From the test result, $P=0.012366<0.05$, we reject Ho and conclude that the variance is not constant.

4.3 Evaluation of Research Hypothesis

From the results and analysis so far, we see that external debt stock and external debt service have significant impact on GDP as is shown by t-test and their probabilities. The F-test also showed that the models are significant in explaining the variations in GDP. We therefore reject Ho (refer to Chapter 1) and conclude that external debt stock and external debt service both have significant impact on Uganda's economic growth.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Findings

Since 1985, Uganda has been engaged in debt servicing, rescheduling and buy back with its creditors. Yet its debt stock as at the end of 2004 was \$36 billion dollars after having paid about \$35 billion to its creditors on \$15 billion which it actually borrowed. The situation could be blamed on two factors: (1) compound interest accrued to the actual loan within these years; and (2) the disposition of the Paris Club of Creditors towards the restructure of Ugandan debt for political reasons.

The major findings of this study are highlighted below:

- i. It was found that there is a general increase in the external debt stock of the country over the years mostly due to accrued volatile compound interest and the ever increasing appetite of various governments to secure loan for dubious projects.
- ii. It was also found that the external debt of Uganda has been unproductive in terms of its contribution to the growth process of the country due to corruption and challenges of debt sustainability. The effect of the debt service payments was not found to impair economic growth thereby not eroding the gains of the external debt.

5.2 Conclusion

Uganda's debt crisis can be attributed to both exogenous and endogenous factors such as the nature of the economy, economic policies, dependency on oil, dwindling foreign exchange receipts etc. The origin of Uganda's external debt dates back to 1958. Debt service payments were within manageable limits until 1982, but became unmanageable in 1983 because of the preference for private lending.

However, Ugandan political leaders need to develop homegrown policies to enhance the country's competitive advantage in the international market in this era of globalization. Besides, conscious efforts must be made to secure total exit from all forms of commercial debts that exposes the

country to another regime of debt overkill. Uganda must also explore and develop more export products outside crude oil.

5.3 Recommendations for further research

The study did not explore the debt threshold in Uganda with regard the upper limit for debt in Uganda beyond which the economy is hurt. Further studies should be done in order to address the lacuna whose results may help set a ceiling for borrowing in Uganda

REFERENCES

- Adepoju A. A., Salau A. S. and Obayelu A. E. (2017) The Effects of External Debt Management on Sustainable Economic Growth and Development: Lessons from Uganda. Munich Personal RePEc Archive (MPRA) Paper. No. 2147, pp. 1-30.
- African Forum and Network on Debt and Development (2017) Uganda: Foreign Debts, Stolen Wealth, IFIS and The West, A Case Study. Harare: AFRODAD.
- Ajayi, R. (2010). “On the Simultaneous Interactions of External Debt, Exchange Rates, and Other Macroeconomic Variables: The Case of Uganda”. Centre for Economic Research on Africa, October.
- Ajisafe, R. A., Nassar, M. L., Fatokun, O., Soile, O. I., and Gidado, O. K. (2016). External Debt and Foreign Private Investment in Uganda: A test for causality. *Africa Economic and Business Review*.4(1), pp. 48-63.
- Aluko F. and Arowolo D. (2016). Foreign aid, the Third World’s debt crisis and the implication for economic development: The Ugandan experience. *African Journal of Political Science and International Relations*. 4(4), pp. 120-127.
- Ayadi F. S. and Ayadi F. O., (2018).The Impact of External Debt on Economic Growth: A comparative study of Uganda and South Africa. *Journal of Sustainable Development in Africa*.10(3), pp. 234-264.
- Ayres RU, Warr B, (2012) Economic growth models and the role of physical resources. In: Bartelmus P (ed) *Unveiling wealth: on money, quality of life, and sustainability*. Springer, Dordrecht
- Bank of Uganda, (2017) State of economy Report
- Bank of Uganda, (2018). Statement of Accounts and Annual Reports. Abuja:Bank of Uganda.
- Bank of Uganda, (2019). Statistical Bulletin. December.

- Borensztein, E. (2010)., “Debt overhang, debt reduction and investment: The case of the Philippines”. International Monetary Fund working paper No. WP/90/77, September.
- Boyce, J. K. and Ndikumana, L., (2012).“Africa’s Debt: Who Owes Whom?” Department of Economics and Political Economy Research Institute, University of Massachusetts, Working Paper Series, No. 48, November.
- Cecchetti SG, Mohanty MS, Zampolli F, (2010) The Future of Public Debt: Prospects and Implications. BIS Working Papers No. 300, Basel: Bank for International Settlements
- Chipalkatti, N. and Rishi, M. (2011). ,“External Debt and Capital Flight in the Indian Economy”. Oxford Development Studies, Vol. 29, No. 1.
- Chongo BM, (2013) An econometric analysis of the impact of public debt on economic growth: the case of Zambia; A Dissertation Submitted to the University of Zambia in Partial Fulfilment of the Requirement for the Degree of Master of Arts in Economics
- Clements, B., Bhattacharya, R. and Nguyen, T. Q. (2013).“External Debt, Public Investment, and Growth in Low-Income Countries”. IMF Working Paper WP/03/249, December.
- Cohen, D., (2013), “Low investment and large LDC debt in the 1980s”. The American Economic Review, June 2013
- Dasgupta D, (2010) Modern Growth Theory. Oxford University Press, Oxford, pp 67–68. <https://doi.org/10.1016/j.iimb.2012.01.002>
- Dereje Abera Ejigayehu, (2013). The Effect of External Debt on Economic growth: Department of economics Magisteruppsats 30 hp | Vårterminen 2013
- Hameed A., Ashraf H. and Chaudhary M. A., (2018). External Debt and its Impact on Economic and Business Growth in Pakistan. International Research Journal of Finance and Economics .Issue 20.

- Hassan MH and Akhter T, (2012) Impact of Public Debt Burden on Economic Growth: Evidence from Bangladesh (December 1, 2012). Journal of Finance and Banking, Vol. 10, No. 1 & 2, June–December 2012, University of Dhaka, Bangladesh
- Kumar M, Woo J (2010), Public debt and growth, IMF Working Paper 10/174
- Ministry of Finance planning and Economic Development, (2017) Public debt, Guarantees, and other financial liabilities report for FY 2017/18,
- Ministry of Finance Planning and Economic Development., (2017). Back ground to the budget for Fiscal Year 2016/17.Kampala, Uganda. www.finance.go.ug
- Ministry of Finance Planning and Economic Development., (2017). Debt Sustainability Analysis Report for Fiscal Year 2016/17.Kampala, Uganda. www.finance.go.ug
- Ministry of Finance Planning and Economic Development., (2017). National Budget Framework Paper for Fiscal Year 2016/17.Kampala, Uganda. www.finance.go.ug
- Modigliani, F, (2011) Long–run Implications of Alternative Fiscal Policies and the Burden of the National Debt. Economic Journal: 7(1), 730–755.
- Muinga RM (2014) External Public Debt and Economic Growth in Kenya, Research Paper Submitted to the School of Economics in Partial Fulfillment of the Requirements for the Award of the Degree of Master of Arts in Economics of the University of Nairobi
- National Planning Authority, (NPA) (2010) Uganda Vision 2040
- Ochieng, J., Kiprop, S., Kalio, A., and Gisore, N., (2014). Effect of foreign aid on economic growth in developing countries. African Journal of Business Management, Vol. 8, Issue 21, pp. 1011-1018.
- Okwonkwo, Chinedu, S., Odularu, Gbadebo, O. (2013). External debt, Debt Burden and Economic growth Nexus: Empirical evidence and policy lessons from selected West African countries.

- Oryema, J.B. (2019)., “The Impact of External Debt on Economic Growth in Sub Saharan Africa: (MA Dissertation). Retrieved from makir.mak.ac.ug/bitstream/handle/10570/2694.
- Oxfam, (2016) who is growing; Ending inequality in Uganda, A study of the drivers of inequalities in Uganda. 333
- Pattillo, Poirson., H. C. A., & Ricci, L. A. (2014). What are the channels through which external debt affects growth? Working Paper No.04/15.
- Reinhart, C. M., and K. S. Rogoff. 2013. “Financial and Sovereign Debt Crises: Some Lessons Learned and Those Forgotten.” IMF Working Paper No. WP/13/266.
- Ricardo D., (2011). The Works and Correspondence of David Ricardo, vol. IV, ed. by Sraffa,P. with the collaboration of M. Dobb, Cambridge: Cambridge University Press.
- Ricardo D., (2012). The Works and Correspondence of David Ricardo, vol. IX, ed. by Sraffa, P. with the collaboration of M. Dobb. Cambridge: Cambridge University Press.
- Sachs, J., (2014). Foreign debt and economic performance: The summary volume National Bureau of Economic Research, Chicago; distributed by University of Chicago Press, Chicago, IL.
- Saint–Paul, G. (2012) Fiscal Policy in an Endogenous Growth Model. Quarterly Journal of Economics 107: 1243–1259
- Smith, A., (2016). The Wealth of Nations, edited by E. Cannan. New York: Random. House 1937.
- Solow, R. M., (2014). “A Contribution to the Theory of Economic Growth”. Quarterly Journal of Economics. Vol 70 pp. 65 -94.
- Sulaiman, L.A., &Azeez, B.A., (2012). Effect of external debt on economic growth in Nigeria. The Journal of Economics and Sustainable Development, Vol.3, No.8, 2012
- Torgny H. Louis, K,(2015). Aid and Reform in Uganda: Country Case Study. Economic Policy Research Centre, Kampala.

- Ubok-Udom, E.U., (2014). "Development through Debt: Rationalizing the Costs of External Borrowing." *The Nigerian Journal of Economic and Social Studies*, 20, 48-56.
- UDN., (2016). *Uganda Debt Network Annual report: Uganda Debt Network*. Uganda, Kampala
- Were, M., (2011). *The Impact of External Debt on Economic Growth in Kenya: An Empirical Assessment*, UNU-WIDER Research Paper, DP2001/116.

APPENDIX I

Regression Data for the Effect of External Debt on Economic Growth of Uganda (1985-2020)

Year	RGDP (N'M)	EXD (N'M)	INF	EXR	EDS (N'M)	GEX (N'M)	INT
1985	205222.1	2331.2	21.42	0.61	600	11413.7	7.75
1982	199685.3	8819.4	7.16	0.67	700	11923.2	10.25
1983	185598.1	10577.7	23.22	0.72	1300	9636.5	10
1984	183563	14808.7	40.71	0.76	0	9927.6	12.5
1985	202036.3	17300.6	4.67	0.89	1335.623	13041.1	9.25
1986	205971.4	41452.4	5.39	2.02	2582.772	16223.7	10.5
1987	204806.5	100789.1	10.18	4.02	2974.8	22018.7	17.5
1988	219875.6	133956.3	56.04	4.54	7181.826	27749.5	16.5
1989	236729.6	240393.7	50.47	7.39	16023.74	41028.3	26.8
1990	267550	298614.4	7.5	8.04	28722.1	60268.2	25.5
1991	265379.1	328453.8	12.7	9.91	34040.85	66584.4	20.01
1992	271365.5	544264.1	44.81	17.3	41391.98	93835.5	29.8
1993	274833.3	633144.4	57.17	22.05	39083.63	136645.4	36.09
1994	275450.6	648813	57.03	21.89	40343.27	156837.2	21
1995	281407.4	716865.6	72.81	21.89	35474.93	254038	20.18
1996	293745.4	617320	29.29	21.89	41078.77	282969.6	19.74
1997	302022.5	595931.9	10.67	21.89	32760.57	428215.2	13.54
1998	310890.1	633017	7.86	21.89	27855.9	487113.4	18.29
1999	312183.5	2577374	6.62	92.52	159587.7	947690	21.32
2000	329178.7	3097384	6.94	109.55	187988.9	701059.4	17.98
2001	356994.3	3176291	18.87	112.48	239376.6	1018026	18.29
2002	433203.5	3932885	12.89	126.4	147685.8	1018156	24.85
2003	477533	4478329	14.03	135.4	244976.5	1225966	20.71
2004	527576	4890270	15.01	132.67	232802.7	1426200	19.18
2005	561931.4	2695072	17.85	130.29	1164912	1822100	17.95

2006	595821.6	451461.7	8.24	128.27	863154.5	1938003	17.26
2007	634251.1	431079.8	5.38	117.97	120570.1	2450897	16.94
2008	672202.6	493180.2	11.6	132.56	61591.35	3240820	15.13
2009	716949.6	590441.1	12.5	149.58	64026.22	3452990.8	18.36
2010	775525.7	689845.3	13.7	150.66	53300	4194217.9	17.59
2011	281407.4	716865.6	72.81	21.89	35474.93	254038	20.18
2012	293745.4	617320	29.29	21.89	41078.77	282969.6	19.74
2013	302022.5	595931.9	10.67	21.89	32760.57	428215.2	13.54
2014	310890.1	633017	7.86	21.89	27855.9	487113.4	18.29
2015	312183.5	2577374	6.62	92.52	159587.7	947690	21.32
2016	329178.7	3097384	6.94	109.55	187988.9	701059.4	17.98
2017	356994.3	3176291	18.87	112.48	239376.6	1018026	18.29
2018	433203.5	3932885	12.89	126.4	147685.8	1018156	24.85
2019	477533	4478329	14.03	135.4	244976.5	1225966	20.71
2020	527576	4890270	15.01	132.67	232802.7	1426200	19.18

Source: Ministry of Finance and Economic Development, Department of Debt Management, Bank of Uganda's Statistical Bulletin and Annual Reports for various years.