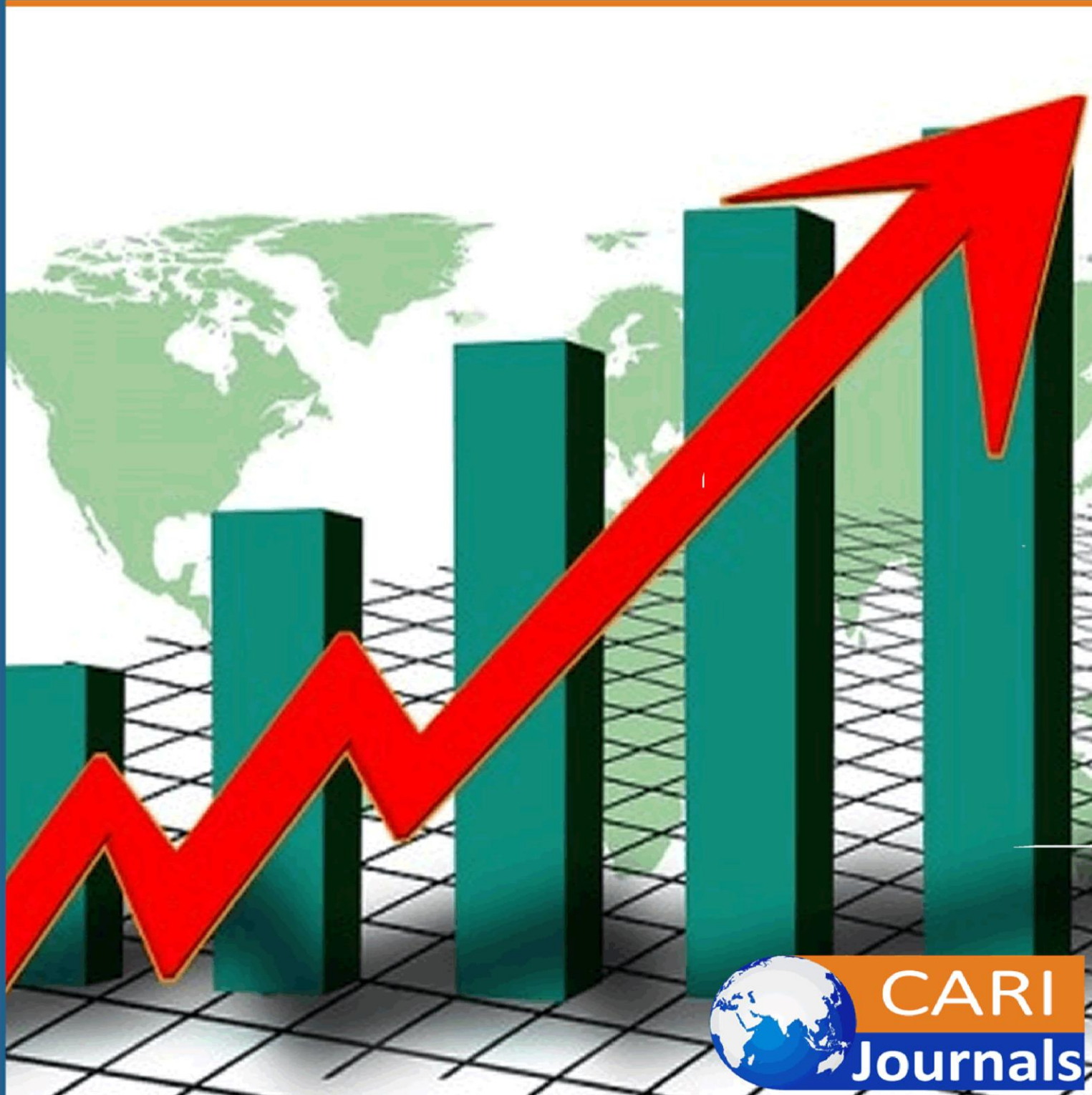
International Journal of
Economic Policy
(IJECOP)

External Debt and Economic Growth Nexus in Somalia: 1990 - 2021



CARI Journals

International Journal of Economic Policy
ISSN: 2788-6352 (Online)
Vol. 4, Issue No. 3, pp 31 - 45, 2024
www.carijournals.org

External Debt and Economic Growth Nexus in Somalia: 1990 - 2021

[1]Professor Hassan Osman Ga'al, [2*]Abdirashid Abdalla Sheikh Ali

[1]Rector, Somali National University.

[2]Lecturer, Department of Economics, Faculty of Economics and Management Science, Somali National University.

https://orcid.org/0009-0002-3549-6336

Accepted: 14th June 2024 Received in Revised Form: 14th July 2024 Published: 14th Aug 2024

Abstract

Purpose: The study aimed to empirically investigate the effect of external debt on economic growth in Somalia from the period of 1990 to 2021.

Methodology: The study was conducted based on an ex-post facto research design with a focus on longitudinal design. The study fully used quantitative research to evaluate the secondary data for scientific evaluation and to determine the conclusions for the objectives. Augmented Dickey Fuller Test (ADF) was used to examine the stationarity properties of the time series before analysis. Co-integration techniques developed by Johansen (1988) and Johansen and Juselius (1990) and Error Correction Model (ECM) were used to examine the long-run and short-run association between external debt and economic growth respectively. Multiple regression analysis was also done to capture the impact of external debt and economic growth in Somalia from 1990 to 2021. **Findings:** According to our research findings, Somalia's economic growth has been adversely affected by its external debt, both in the short-run and long-run, over the past three decades. The impact of external debt on Somalia's economic growth has been found to be negative and statistically significant.

Unique Contribution to theory, Practice and Policy: Firstly, based on our findings, the study recommends that Somali government should avoid borrowing from commercial sources due to the fact that commercial sources have higher interest rate and short maturity periods than multilateral sources. Secondly, the study recommends Federal government of Somalia to launch tight borrowing strategies, external financing management and stimulating economic policies in order to avoid ill effects of external debt and debt crisis in the future. Lastly, there is a need for the Somali government to increase the possibility of easily data accessibility in order to help economists, researchers and all interested parts to be able to use them in an advanced level to

contribute to more accurate and reliable findings for the improvement of Somali economic situation today and in the future. **Keywords**: *External debt, economic growth, Somalia.*

1. Introduction

According to Boboye (2012). Most of the African nations if not all, started to depend more on foreign investment after 1970s, which also led to an increase in debt. Developing nations including Somalia borrow from developed economies in order to boost their security, industry, and agricultural sectors. A nation may borrow money from abroad in particular if the borrowed resources are used to fund productive economic activities which lead to economic development. Nevertheless, excessive borrowing will result in a rise in external debt, which will have an adverse impact on the economy (Jilenga & Xu, 2016).

Different scholars and international institutions defined external debt differently. Udoffia & Mankiw (2016) defined external debt as packages containing a combination of financial, technical and managerial requirements coming from outside the country's borders, intended to support economic growth and development and repayable in foreign currency at a predetermined future period. One of the main sources of government revenue is foreign debt. The accumulation of foreign debt should not indicate slow economic growth. It is a country's inability to meet its debt obligations, compounded by a lack of information about the structure, nature and size of its external debt [2]. According to International Monetayr Fund (2016), external debt is a portion of a nation's debt that was borrowed from foreign lenders. External debt may also be defined as a debt owed to foreigners and repayable as a foreign currency. (Sangadah & Kartawidjaja, 2020).

Hung (2021) also defines the external debt as the total external debts per GDP ratio on percentage. Then, it is decomposed into sub-components, including the public and private debts, the short-term and long-term debts, foreign currency and domestic currency debts. External debt is based on the notion that if a citizen has an existing liability to a foreigner that obligates payments of principal and interest in the future date, this liability represents an entitlement on the resources of the economy of the citizen, and therefore is an external debt of that country [6].

Hung (2021) believes that the external debts are a section of trans-border capital flows. Specifically, net total capital inflows can be decay into foreign direct investment (FDI), foreign

portfolio equities investment, external debts (Alfraro et al, 2014). Therefore, the relationship between the external debts and economic growth is highlighted by theory and evidence linking the international capital flows and economic growth.

However, the above-mentioned empirical evidence records that the net total capital inflows, including the external debts, does not necessarily cause a higher economic growth rate as implied by the theory. Additionally, the external debts are also a part of total debts. In details, total debts can be decomposed into domestic debts and external debts [9].

External debt accumulation is a widespread occurrence in both developed and developing nations, and it has integrated itself into the fiscal sectors of the majority of these economies. These economies' high levels of fiscal debt and their need to close investment and savings gaps force them to augment their domestic savings with foreign resources. Were (2001) contends that capital accumulation is a necessary component of economic expansion. There is still debate among academics and policymakers regarding the impact of growing external debt on macroeconomic variables. It has both positive and negative aspects. Some experts believe that external debt promotes economic growth because it increases capital inflow, which quickens the rate of economic growth. Conversely, if external debt accumulates beyond a certain threshold, investment will be hampered, which will reduce economic growth. In the last three decades, external indebtedness in African nations increased dramatically. Eight highly indebted poor countries and thirteen less heavily indebted poor countries had annual average growth rates of their external debt stock exceeding 10 percent (IMF, 2015).

Somalia fell into a debt trap and continued to lead the Heavily Indebted Poor Countries initiative because there was no functioning central government to oversee and manage the external debts received from foreign nations and institutions during the 32 years that the country was embroiled in civil conflicts and statelessness. As a result, this study empirically investigates the effects of external debt on economic growth in Somalia from 1990 to 2021.

2. Theoretical Literature Review

Mashingaidze (2014) analyzed the effects of external debt on economic growth of Zimbabwe using time series data for the period 1980 to 2012. The granger causality tests showed that external debts cause to economic growth which implies that external debts influence Zimbabwe's economic growth. However, the results imply that existence of debt overhang which may have repercussions on future economic growth. Zouhair and Fatma (2014) in their study of economic growth in 19 developing countries found that external debt as a percentage of GDP and GNI had a negative and statistically significant effect on economic growth. Similarly, the external debt had a negative effect on investment in the 19 countries. Although this study focused on developing countries such

as Kenya, its findings are inconclusive. Additionally, it did not identify the channels through which external debt affect economic growth. Nwaolisa et al., (2014) examined the effects of external debt on economic growth in East Africa Community (EAC), employing a panel fixed-effects model. The findings of this study show that external debt has a negative significant effect on per capita GDP growth rate in East Africa Community (EAC).

Selvanathan (2015) examined short-run and long-run relationships between external debt and economic growth in 40 HIPC countries over the period of 1970-2007 with the aid of the growth accounting process. The impact of capital formation, trade and population growth on economic growth in these countries was also examined. Results indicate that capital formation has a positive impact on GDP in the short run as well as in the long-run; debt has a negative influence in the short run as well as in the long-run; and population increase has a positive influence on the economic growth. Arnone, al. (2015) have also found out that large debt stock leads to capital flight, high tax rates and continuous over-borrowing with a negative effect on growth.

Obademi (2016) empirically examines the impact of external debt on economic growth of Nigeria by using ordinary least square method. The empirical result shows that external debt has a negative effect on Nigeria economic growth while debt service has a positive significant influence on economic growth.

Using the OLS method, Masika (2016) investigated the impact of external debt and external debt servicing on economic growth in the case of DRC. She proved from her results that the increase of external debt deteriorates economic growth in the DRC in short and long run. She found as result a negative impact and statistically significant relationship between external debt and economic growth. The economic intuition behind this is that the more external debt is contracted in DRC, economic growth decreases due to the wrong orientation of the external debt in different sectors.

Panizza and Presbitero, (2018) used the variable instrument approach to investigate the causal effect of external debt on economic growth in OECD countries. Their analysis revealed a negative relationship between debt and economic growth. However, they did not find any causal effect of external debt on economic growth after correcting for endogeneity. Although this study sheds light on the causal relationship between public debt and economic growth, its findings are inconclusive. Thus, they might not be applicable in other countries.

Getinet & Ersumo (2020) tried to explain the effect of external debt over economic growth on sub -Saharan Africa countries by applying an augmented production function. He used the debt crisis period, 1980-1990 for the analysis. The main aim of Getinet & Ersumo (2020) was to examine the debt overhang hypothesis directly. As per his result, the debt variables which are included in the

model took a negative coefficient on the period 1980-1990. Result of Getinet & Ersumo (2020) on effects of external debt on economic growth show that the impact of external debt on economic growth is statistically significant in terms of debt crowding out effect over the selected eight countries in particular and over all the heavily indebted poor African countries in general in a restricted sense. In the other hand, the effect of external debt on economic growth is found to be statistically insignificant in terms of debt overhang effect. Getinet & Ersumo used cross section data from 1991 to 2010 and the OLS Method.

Checherita and Rother (2021) found a non-linear relationship between external debt and per capita GDP growth rate in 12 Euro Area countries. Their analysis, which was based on dynamic panel model and data for 40 years starting 1970 revealed a u-shaped relationship between external debt and economic growth rate with the debt turning point at approximately 90% to 100% of GDP. This means that a high external debt-to-GDP ratio led to low long-term growth rates at debt levels above 90% to 100% of GDP. The study concluded that a one percent increase in debt-to-GDP ratio led to -0.10% reduction in GDP growth rate.

In contrast to the pessimistic results presented above, other experts have the view that external debt will have promising effect on economic growth because it increases capital inflow and when used for productive investments can accelerates economic growth.

Regarding the case of Tanzania, Upendo (2015) reached results that there is positive and significant effect of external debt on economic growth and debt service has negative and significant effect on economic growth. The sample was taken from yearly rang data of 1990-2013 i.e. 24 observations. The method of analysis was OLS. A multiple regression was formulated including GDP growth rate as the dependent variable, external debt and debt service as the independent variables. In order to determine the long run relationship, the author employed Johnson co-integration test. The coefficient of determination found was 0, 5333. This explains that about 55,3% variation of economic growth in Tanzania is explained by external debt and debt service while the remaining percent could be explained with other variables not included in the model. He found also that a unit increase in external debt leads to 4, 27 unit increase in economic growth. Ncanywa & Masoga (2014) cited by Sánchez-Juárez & García-Almada, 2016) show with data of American economy and the method of Panel vector Regression, that public capital has a positive effect on growth in the short and the medium term.

Balago (2017) conducted a study to examine whether or not relationships exist between external debt and economic growth in Nigeria. The result of ordinary least square model showed that external debt has fairly significant positive relationship with economic growth. Marobhe (2018) conducted a study to examine the relationship between external debts and economic growth in

Tanzania using time series data over the period of 1970 to 2015. The ordinary least squares multiple regression analysis was conducted and the results revealed a significant positive relationship between external debt and economic growth. The Granger causality test was also employed and the results revealed evidence of causality between external debts and economic growth in Tanzania. In addition, results from Johansen Co-integration test also provide evidence of existence of long run association/co-integration between external debt and economic growth. So, this study provides evidence that may help to reach a conclusion that external debts have aided to stimulate economic growth in Tanzania.

The findings from these studies are inconsistent and therefore insufficient to attain an agreement on the effects of external debt on economic growth. Therefore, this gap forms a basis for this study which was intended to empirically investigate the effect of external debt on economic growth in Somalia for the period of 1990 to 20 to generate valuable conclusions.

3.0 Methodology

3.1 Research Design

The study was conducted based on an ex-post facto research design with a focus on longitudinal design. The study fully used quantitative research to evaluate the secondary data for scientific evaluation and to determine the conclusions for the objectives. The design is a quasi-experiment intended to determine the influence of the independent variable.

3.2 Stationarity Test

The series was tested for stationarity using Augmented Dickey-Fuller test (ADF). The reason of this test was the fact that macroeconomics variables are desired when they are stationary, because non-stationary variables yield spurious results. The ADF statistic can be expressed as follows;

$$\Delta Y_t = \alpha_0 + \alpha_{1t} + \alpha_{2t} y_{t-1} + \sum_{i=1}^{k} \theta_i \Delta y_{t-1} + \varepsilon_t - - - - - - - - - - (1)$$

Where, Δ = first difference operator, y = variable under test, t = time, k = appropriate lags selected using the AIC, θ = coefficients, ε = error terms.

The ADF statistic tests the null hypothesis that the series are non-stationary against the alternative that the series are stationary. Where the absolute value of the computed ADF statistic is greater than the tabulated one, the null hypothesis is rejected and an inference drawn that the series is stationary at a given level of significance. The series which were found to be non-stationary were differenced to make them stationary.

3.3 Data Type, Source and Model Specification

This study used secondary data from 1990 to 2021 and it is time series data in nature. The OIC Statistics Database or SESRIC, 2023 served as the sole data source for this study. To empirically investigate the effects of external debt on economic growth in Somalia, using Johansen Cointegration test, and error correction Model, the study specified long-run and short-run model equations respectively in line with the specific objectives. Finally, the study concludes with a specification of multiple regression model using ordinary least square (OLS) method.

3.3.1 Johansen Co-Integration Test

The study checked if the variables have long-run relationship with each other using Johansen cointegration test which is appropriate for testing the long-run association between variables when they are all stationary at same order (Johansen, 1988). This technique depends on direct investigation of co-integration Vector Auto Regressive (VAR) representation. The co-integrating equation is specified as;

$$y_t = u + \sum^{p}_{i=1} \beta_i y_{t-1} + \varepsilon_t \text{ ---------- (2)}$$

Where, y = endogenous variables, β = coefficients, p = lag order, and ε = vector of white noise error terms.

3.3.2 Error Correction Model (ECM)

If the evidence of co-integration is observed between external and economic growth, it implies that there exists a long-term equilibrium relationship between them, so Error Correction Model would be estimated to evaluate the short run properties of the Co-integrated series because we are interested in univariate analysis. ECM leads to better understanding of the short-term interaction between different stationary series (Engle and Granger, 1987). The model was specified as;

$$\Delta GDP_t = \alpha_0 + \sum_{i=1}^{j} \alpha_1 \, \text{GDP}_t + \sum_{i=1}^{j} \alpha_2 \, \text{EXD}_{t\ -1} + \sum_{i=1}^{j} \alpha_3 \, \text{GFCF}_{t-1} + y_1 \text{ECT}_{t-1} + \varepsilon_{1t} \text{ -------- (3)}$$

Where, Δ is the first difference, y is the short-run coefficient of the error correction term, and ECT_{t1} is the error term with lag one.

The error correction mechanism integrates the short run dynamics with the long run equilibrium without losing long run information. This term captures the short run relationship. It attempts to correct deviations from the long run equilibrium path and its coefficient can be interpreted as the speed of adjustment or the amount of disequilibrium transmitted each period to economic growth, (Ndung'u, 1993). The hypothesis was developed in relation to this test; H_o: There is no short-run relationship between variables (external debt and economic growth).

3.3.3 Multiple Regression Analysis

Ordinary least square (OLS) was employed in this study to estimate the influence external debt on economic growth (GDP), covering the period of 1990 to 2021 dataset. The multiple regression model in this study is expressed as follows:

$$GDPt = \beta_0 + \beta_1 EXD_t + \beta_2 EXP_t \beta_3 GFCF_t + e_1 \text{ ---------- (4)}$$

Where, GDP = gross domestic product (current prices), EXD = total external debt stock (in US Dollar), EXP = exports of goods and services % of GDP (current prices) GFCF = gross fixed capital formation (current prices), Bs = slopes of regressions equation; t = time; e = error term.

4.0 Data Analysis

4.1 Test for Stationarity

The variables were tested for stationarity using the Augmented Dickey Fuller (ADF). The results of the tests for stationarity are presented in the Table 4.1

Table 4.1 Augmented Dickey Fuller (ADF) Results

	At level (5% sig. level)		At first difference (5% Sig. Level)	
Variable	**Intercept**	**Prop.**	**Intercept**	**Prop.**
GDP	3.332408	0.8853	2.024308	0.0010
EXD	461052.9	0.6966	134485.7	0.0001

EXP	0.589575	0.9559	0.438488	0.0201
GFCF	2247898	0.9690	35091344	0.0013

Source: Author's own computation using E-views 12

The null hypothesis for the ADF test was that all series have a unit root. Therefore, the results in Table 4.1 show that all variables are non-stationary at level when an intercept is included in the ADF test. Nevertheless, all variables became stationary when I perform the first difference test of the data. this implies that the prerequisite for the Johansen co-integration test is satisfied.

4.2 Lag Length Selection

To perform Johansen co-integration test, several information criteria must be used in order to determine the optimal lag length of the Vector Autoregressive (VAR) model. All five information criteria namely: the Sequential Modified LR test statistic (LR), Final Prediction Error (FPE), Schwarz Information Criterion (SIC), Hannan-Quinn Information Criterion (HQ), and Akaike Information Criterion (AIC) suggested that 3 as the optimal lag length as shown in table 4.2.

Table 4.2: Lag Order Selection Criteria

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-1727.933	NA	8.79e+46	119.4436	119.6322	119.5027
1	-1642.109	142.0525	7.22e+44	114.6282	115.5712	114.9236
2	-1614.930	37.48828	3.58e+44	113.8573	115.5546	114.3889
3	-1581.243	37.17287*	1.28e+44*	112.6373*	115.0891*	113.4053*

Source: Author's own computation using E-Views 12

* indicates lag order selected by the criterion

4.2 Johansen Co-integration Test

The study was done to check if the variables have long-run association with each other using Johansen co-integration test. This test is based on the maximum likelihood estimation and two statistics: Trace statistic and Maximum Eigen values. The null hypothesis: there is no Cointegration in which we reject if the probability value is less than 5%, (0.05), while we fail to reject in the event that probability is greater than 5%, signifying that there is no long-run effect of external debt on Somali economic growth. The results of Co-integration analysis using Johansen cointegration test have been presented in the tables 4.3 and Table 4.4.

Table 4.3 Johansen Co-Integration test results for long-rung: (Trace Statistic)

Hypothesized No. of CE(s)	Eigenvalue	Trace statistic	0.05 Critical value	Prob.**
None*	0.822921	111.7412	47.85613	0.0000
At most 1*	0.754006	63.26865	29.79707	0.0000
At most 2*	0.574655	24.00012	15.49471	0.0021
At most 3	0.002290	0.064202	3.841465	0.8000

Source: Author's own computation using E-Views 12

The results in the Table 4.3 from the unrestricted Co-integration trace rank test using one (3) as the maximum lag length of the VAR model show that there are 3 Co-integrating equations. Therefore, there is co-integration among series: EXD, EXP and GFCF with GDP. Comparing p-value at None and the p-value less than 5%, we reject the null hypothesis of no co-integration at 0.05 level of significance. It is therefore, concluded that there is a significance long-run relationship between external debt and economic growth in Somalia from 1990 to 2021.

Table 4.4: Johansen Co-Integration test results for long-rung: (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical value	Prob.**
None*	0.82291	48.47251	27.58434	0.0000
At most 1*	0.754006	39.26853	21.13162	0.0001
At most 2*	0.574655	23.93591	14.26460	0.0011
At most 3	0.002290	0.064202	3.841465	0.8000

Source: Author's own computation using E-Views 12

Maximum Eigenvalue in Table 4.4, reveal that there are 3 co-integrating equations, implying that external debt has long-run relationship with Somali economic growth in the last three decades. These findings agreed the results got from the trace rank test, hence by observing the p-value from the table 4.4, the researcher rejected null hypothesis that there is no co-integration among variables.

4.4 Error Correction Model

After confirming that variables are co-integrated, an Error Correction Model which is constructed by including in the model, the lagged terms of the variables and the Error Correction Term was generated. The Error Correction Model shows the short-run relationship among variables. The results are presented in the Table 4.5.

Table 4.5: Short-run Relationship Model: Dependent Variable: D(GDP)

ECM Regression

Case 2:	Restricted	Constant and No Trend		
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EXD)	-159.2532	98.58859	-1.615331	0.01183
D(EXP)	69927656	38571596	1.812931	0.0414
D(GFCF)	6.197599	0.438765	14.12509	0.0000
CointEq(-1)*	-0.377684	0.210319	-1.795772	0.00842
R-squared	0.885474			
Adjusted Rsquared	0.867855			
F-statistic	50.25564			
Prob(F-statistic)	0.000000			

Source: Author's own computation using E-Views 12

As indicated the Table 4.5, in the short-run, external debt (EXD) is negatively significantly related to economic growth (GDP). The coefficient of external debt (EXD) is -159.2532, indicating that there is a negative relationship between external debt and economic growth (GDP) from the period of 1990 to 2021. This implies that one dollar increase in external debt, decreases GDP by -159.2532 units.

The lagged error correction term (CointEq(-1)) is statistically significant and correctly signed (negative). This implies that in one year the real GDP adjusts itself to the equilibrium by almost

37.8 percent. Furthermore, according to the coefficients and P-values of exports and gross fixed capital formation in the above table, have positive significant effects on the economic growth.

The coefficient of the established R^2 is 0.885474, indicating that about 89% of total variation or a change in the growth of Somalia is explained by changes in the explanatory variables in the model, while the remaining is explained by other factors not included in the study. The Prob.-F-statistic

0.000000 is below the 0.05 significant level. This means that the regression model was significant in giving true estimate of the variables.

4.5 Regression Analysis

Multiple regression analysis was done using Ordinary least square (OLS) method to estimate the influence of explanatory variables on GDP. The Table 4.6 provides regression results covering 1990 to 2021 dataset.

Table 4.6: Estimation Results of OLS Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.49E+08	2.27E+08	1.536290	0.1357
EXD	-229.4885	106.3116	-2.158641	0.0396
EXP	24432632	11384423	2.146146	0.0407
GFCF	7.266083	0.418384	17.36702	0.0000
R-squared	0.971333			
Adjusted Rsquared	0.968262			
F-statistic	316.2483			
Prob(F-statistic)	0.000000			

Source: Author's own computation using E-Views 12

Looking at the coefficients of the variables in Table 4.6, one finds that external debt is negative and statistically significant at 5 percent level of significance in explaining variations in economic growth (GDP) in Somalia because their probability value (P-value) is 0.0396 for external debt, the effect between the variables is negative, meaning that a unit increase in the external debt led to decrease in the economic growth by -229.4885 units in Somalia's economic growth from the period of 1990 to 2021. The other two independent variables in the model revealed positive and statistically significant effects on Somalia's economic growth.

Moreover, the results in Table 4.6 show the performance of the regression fit and the probability of the F-test. The overall performance of the model is moderate at R-squared (0.971333), implying that changes in GDP proxies for economic growth in Somalia are explained by changes in the explanatory variables selected in this study by 97 percent. The adjusted R squared of 0.968262 on the other hand expresses that for this change 96.8 percent of the data are accounted. In this case, external debt accounts for the change in economic growth of Somalia by 96.8 percent. The standard error estimate shows close scatter of the data.

5.0 Conclusion and Recommendations

5.1 Conclusion

This study aimed at empirically investigating the long-run and short-run relationships between external debt and economic growth in Somalia from 1990 to 2021. Johansen co-integration approach was used to examine the long-run association between the variables in the study. The results of co-integration model revealed that there is long-run relationship between the external debt and economic growth in Somalia for the last thirty years.

The study also examined the short-run relationship between the variables in the study by using Error Correction Model (ECM). The results of the error correction model shown that there is shortrun relationship between external debt and economic growth in Somalia from the period of 1990 to 2021.

Depending on the overall findings of the study, it can be concluded that there is an effect of external debt on economic growth in Somalia. The results showed that external debt is negatively related to the economic growth and it is statistically significant at 5%. This implies that external debt has been hindering Somalia's economic growth so far. Therefore, the study concludes that external debt is a burden instead a blessing for Somalia.

5.2 Recommendations

Based the research findings, the study recommends that Somali government should avoid borrowing from commercial sources due to the fact that commercial sources have higher interest rate and short maturity periods than multilateral sources.

In addition, the study also recommends Somalia federal government to launch tight borrowing strategies, external financing management and stimulating economic policies in order to avoid ill effects of external debt and debt crisis in the future. Finally, there is a need for the Somali government to increase the possibility of easily data accessibility in order to help students, economists, researchers and all interested parts to be able to use them in an advanced level to contribute to more accurate and reliable findings for the improvement of Somalian economic situation and for whole the country.

References

Abdelhadi, S. A. (2013). *External Debt and Economic Growth : Case of Jordan (1990-2011)*. *4*(18), 26–33.

Akyüz, Y. (2017). Global Economic Prospects: In *The Financial Crisis and the Global South* (Issue January). https://doi.org/10.2307/j.ctt183pb3w.5

Ali, Rifaqat ; Mustafa, U. (2012). *1 External debt accumulation and its impact on economic growth in Pakistan Rifaqat Ali and Usman Mustafa*. 1–25.

Bank of Tanzania. (2021). *Economic Bulletin for the Quarter Ending September 2021 Vol. XLIX No.3*. *LIII*(3), 84.

Chigeto, A. D. (2017). *External Debt-Economic Growth Nexus in Developing Countries : Evidence from Ethiopia*. *40*(June 2005), 66–81.

Dar, B. (2017). *Analysis of the Impact of External Debt on Economic Growth in an Emerging Economy : Evidence from Nigeria*. *11*(48), 156–173.

Diallo, B. (2009). External debt and financing of economic development in Guinea. *Proceedings of the African Economic Conference*, 1–29.

Drehmann, M., & Juselius, M. (2012). Do Debt Service Costs Affect Macroeconomic and Financial Stability? *BIS Quarterly Review*, *September*, 21–35.

Ekor, M., & Musa, P. (2021). *Munich Personal RePEc Archive Does external debt impair economic growth in Nigeria ? Does External Debt Impair Economic Growth in Nigeria ? 107844*.

Ezeabasili, V. N., O. Isu, H., & Mojekwu, J. N. (2011). Nigeria's External Debt and Economic Growth: An Error Correction Approach. *International Journal of Business and Management*, *6*(5). https://doi.org/10.5539/ijbm.v6n5p156

Fekadu, M. (2014). *The Impact of External Debt on Economic Growth in Ethiopia Mulugeta Fekadu A Thesis Submitted to The Department of Economics Presented in Partial Fulfillment of the Requirements for the Degree of Master of Science in Economics (Economic Policy Analysis). June*.

Getinet, B., & Ersumo, F. (2020). The Impact of Public External Debt on Economic Growth in Ethiopia: The ARDL Approach to Co-integration. *Journal of Economics and Sustainable Development*, *11*(11), 25–39. https://doi.org/10.7176/jesd/11-11-03

Hung, L. D. (2021). External Debts and Economic Growth when Debt Rating Matters. *Journal of International Commerce, Economics and Policy*, *12*(3), 1–26. https://doi.org/10.1142/S1793993321500162

Ibrahim, H. (2015). *"Effect of External Public Debt on Economic Growth: an Empirical Analysis of East African Countries."* 48.

Kasidi, F., & Said, A. M. (2013). Impact of external debt on economic growth : a case study of Tanzania. *Advances in Management & Applied Economics*, *3*(4), 59–82.

Kharusi, S. Al, & Mbah, A. S. (2018). External Debt and Economic Growth : The Case of Emerging Economy. *Journal of Economic Integration*, *33*(1), 1141–1157.

Lelya, L. L., & Ngaruko, D. D. (2021). *Impact of National Debt on Economic Growth in Tanzania : 1980-2019*. *21*(3), 85–96. https://doi.org/10.9734/AJEBA/2021/v21i330363

Marobhe, M. (2018). External Debts and Economic Growth in Tanzania. *Review of Integrative Business and Economics Research*, *8*(1), 64–80.

Ncanywa, T., & Masoga, M. M. (2018). Can public debt stimulate public investment and economic growth in South Africa? *Cogent Economics and Finance*, *6*(1), 1–13. https://doi.org/10.1080/23322039.2018.1516483

Odekon, M. (2015). Economic Growth and Technology. *The SAGE Encyclopedia of World Poverty*, 27–38. https://doi.org/10.4135/9781483345727.n214

Paper, P. (1998). *Oxfam An Opportunity for a Better Debt Relief for Tanzania : An Opportunity for a Better Debt Relief for Tanzania : April*.

Sánchez-Juárez, I., & García-Almada, R. (2016). Public debt, public investment and economic growth in Mexico. *International Journal of Financial Studies*, *4*(2). https://doi.org/10.3390/ijfs4020006

Sichula, M. (2012). Debt Overhang and Economic Growth in HIPC Countries: The Case of Southern African Development Community (SADC). *International Journal of Economics and Finance*, *4*(10), 82–92. https://doi.org/10.5539/ijef.v4n10p82

Södertörns högskola. (2013). *The Effect of External Debt On Economic growth*. http://sh.divaportal.org/smash/get/diva2:664110/Fulltext01.pdf