A Quantitative Assessment of Uganda's Economic Growth and Stability

Prof. Mugisha David Begumya[1], Asaph Tweheyo[2]

[1]Senior Lecturer, Faculty of Business and Management, International University of East Africa, Kampala, Uganda
[2]Lecturer, Faculty of Business and Management, International University of East Africa, Kampala, Uganda

Abstract: ***Background***: The significant variation in the Gross Domestic Product (GDP) with Gross National Expenditure (GNE), Gross Saving (GS) and export and import of goods and services (EXIM) not only influence the economic activities of diverse areas of an economy but also their dependences. As we consider the Uganda economy, GDP upshot from the pandemic while some predictors dwindled sharply. Hence, this paper tries to evaluate the performance of the Uganda economy.

Methods: The key objective of this paper is to assess the trend and influence of macroeconomic variables on the economic growth of Uganda in the periods of 1983 to 2022. Multi Linear Regression analysis has been employed in our estimation in which GDP is the dependent variable and Gross Capital Formation (GCF), GNE, GS, military expenditure (ME) and EXIM are the determinants.

Conclusions: The volume of GDP, GCF, GNE, GS and EXIM have amplified from 1983 to 2022 while growth rate to the previous year has noted negative and positive growth rate, however, the above-mentioned parameters are having fragility in the last five years. The volume of independent variables like GCF, GS, GNE and EXIM has influenced the GDP and it clarified that the economy of Uganda is a recital for the behaviours of the above-mentioned macroeconomic variables. However, the government policy ought to put emphasis on the asymmetrical progress of the parameters.

Keywords: GDP, GCF, GNE, GS and EXIM

1. Introduction

Economic growth and its drivers have been the focus of debate in theoretical and empirical growth models. The most perplexing and important question has been why certain nations in the world are poor while others are wealthy. Economic growth has been identified as the most effective tool for eliminating poverty and enhancing standard of life in developing nations [1]. For instance, Islam (2010) argues that if a nation achieves an adequate level of development, it will automatically address its poverty concerns. Macroeconomists also generally believe that income growth is a country's primary macroeconomic objective [2]. Many developing and rising nations, including Uganda, regard economic growth rate and low inflation to be among the most important policy goals [3]. Given the essential significance of economic growth, it is essential to examine the factors that may encourage it. Furthermore, Nkurunziza & Bates (2004) point out that the rates of economic growth in countries that are developing continue to be sufficient to put a real dent in the widespread state of poverty and help countries like Uganda to keep up with advanced economies [4]. Some studies investigated Uganda's growth influences for the period 1990-2018 [5] [6] [7]. Based on the above-mentioned fact, this paper tries to evaluate Uganda's economic growth for the years 1983 to 2022.

2. Economy of Uganda

Uganda's economy has tremendous potential and appears to be on track for fast growth and development [8]. Uganda has been blessed with abundant natural resources, such as fertile terrain, consistent rainfall, and deposits of minerals. The informal economy, that is mostly female, can be characterized as a group of vulnerable people who lack job protections [9]. Women confront numerous gender-specific barriers when attempting to access

Uganda's formal economy, and research has found prejudice against financing to women in the informal economy [10] [11]. Historically, the country's energy needs have outpaced domestic energy generation, despite the discovery of huge petroleum reserves in the west [12]. Following the upheaval of the Amin era, the government launched an initiative of economic revival in 1981, with significant foreign support. From mid-1984 onward, excessively expansionist fiscal and monetary policies, as well as a resurgence of civil strife, resulted in a decline in economic performance [13]. The economy has expanded during the 1990s; real gross domestic product (GDP) increased at an average annual rate of 6.7% between 1990 and 2015, while real GDP per capita increased at 3.3% per year over the same period. During this time, the Ugandan economy underwent economic transformation: the proportion of agriculture value added in GDP fell from 56% in 1990 to 24% in 2015; the percentage of industry increased from 11% to 20% (with manufacturing growing at a slower rate, from 6% to 9% of GDP); and the percentage of services increased from 32% to 55% [14]. Since seizing office in early 1986, Museveni's administration has taken significant measures toward economic recovery. The country's infrastructure, particularly its transportation and communications systems, is being rebuilt following conflict and neglect. Realizing the need for additional external assistance, Uganda agreed to a policy framework document with the IMF and World Bank in 1987. Uganda then started implementing economic policies aimed at restoring price stability and maintaining an equitable balance of payments, increasing capacity utilization, rehabilitating infrastructure, restoring producer rewards through appropriate price policies, and improving the mobilization of resources and the allocation in the public sector. These so-called structural adjustment projects significantly modified the form of the Ugandan economy, but did not result in economic growth in the initial decade after their implementation. Uganda's economy has grown rapidly since 1995; however, it is unclear how much of this beneficial change can be attributable to structural adjustment [15]. Uganda has been a member of the World Trade Organization since January 1, 1995, and the General Agreement on Tariffs and Trade since October 25, 1962 [16].

3. Review of Literature

Based on the above-stated background of the study, this analysis is to evaluate the economic performance of Uganda and this section reviews some literature that expresses the performances and issues of Uganda's economy. And also, this review of literature is organized in the form of conceptual context.

Uganda's per capita income has doubled during the last two decades. Much of this development was due to a return to earlier levels of manufacturing and the resumption of commerce after two decades of significant political instability and asset-destroying civil war. Some were the result of large-scale donor-financed repair, while others were caused by a surge in international prices for coffee in the early 1990s. During this time, Uganda implemented a thorough stabilization, rehabilitation, and reform program. Rehabilitation enabled rural people to successfully work their land while opening up new ground for cultivation, while also allowing enterprises to resume operations. Market liberalization enabled farmers and businesses to make better decisions about how much to produce and with what resources. Privatization eliminated inefficient government provision of services and products [17].

A further investigation by Didas (2017) looked into the elements that influence Uganda's economic growth. The author analyzed time series data from 1994 to 2016. The focus was on the association between natural resource usage, inflation rate, technical growth, international trade, population growth, and economic growth. The study used linear regression and ordinary least squares (OLS) to determine the causal connection between the variables that were independent and the variable that is dependent. The data found that none of the independent parameters listed above had a significant association with GDP. However, the population rate showed the strongest positive association with GDP [18].

Additionally, Kenganzi (2018) explored the factors impacting Uganda's economic growth as measured by real GDP. The author calculated a linear regression between Real GDP and independent variables such as FDI, FDI fluctuation, government expenditure, money supply, and trade openness. Data was collected quarterly from 1985 to 1993. The theoretical model was estimated using the autoregressive distributed lag (ARDL) modelling process. The results revealed that trade openness and the supply of money had an important and beneficial impact on economic growth, while foreign direct investment inputs, volatility, and government spending had a negative effect.

The sectors are the drivers of economic expansion in any economy; hence inter-sectoral linkages are the most important focus for practitioners of development and policymakers [19]. James, Mukoki et al. (2023) investigate and quantify the degree of manufacturing and consumption inter-sectoral connections in Uganda's economy.

The multiplier model is used to examine secondary data from Uganda's Social Accounting Matrices (SAMs) in 2009/10 and 2016/17. For validation reasons, a sophisticated set of tests, comprising a Vector Error Correction Model (VECM), is used with a longer time series spanning 1980 to 2020. The study discovered that a one-million-dollar income injection throughout sectors has a greater effect on multipliers (in regards to output, GDP, income, and consumption) over the service sector, followed by agriculture, and then the industry sector [20].

The goal of this research is to see if Uganda's economic growth factors can be completely examined within the framework of neoclassical growth theory. The analysis includes quarterly data from 2007 to 2018. The underlying empirical models are calculated with Instrumental Variables with the Generalized Method of Moments (IV-GMM) in the specific-to-general modelling approach. Estimates reveal that, unlike capital stock each worker, human resources per worker remains a substantial factor influencing Uganda's economic growth, even when additional factors suggested by the theory of endogenous growth are incorporated in the empirical model [21].

From the above-mentioned review of literature, many studies have analyzed the performance of the Uganda's economy and this study tries to fill the gap and analyze the economic variables to evaluate the macroeconomic variables. These reviews are supportive to frame the study with objectives, analysis, and conclusions and draw concrete suggestions for improvement of the economy of the nation.

4. Objective of the Paper

The core objective of the study is to assess the trend and influence of macroeconomic variables on the economic growth of Uganda in the periods of 1983 to 2022.

5. Methodology

As stated in the introduction, the purpose of this paper is to evaluate the trend and impacts of economic determinants on Uganda's economic growth from 1983 to 2022. Multi Linear Regression analysis was used to determine the functional relationship between the variables. More specifically, the above-mentioned technique has been used to capture the magnitude of the macroeconomic variables such as Gross Domestic Product (GDP), Gross Capital Formation (GCF), Gross National Expenditure (GNE), Military Expenditure (ME), Gross Savings (GS), Exports of Goods and Services (EX), and Imports of Goods and Services (IM) on the economic growth of Uganda.

6. Data Used

This study makes use of World Bank data on Uganda's macroeconomic variables like gross domestic product, gross capital formation, gross national expenditure, Military Expenditure (ME), Gross Savings (GS), exports of goods and services, and imports of goods and services from 1983 to 2022 [22]. This data set has been presented in Table – 1.

7. Data Analysis

The above-mentioned data have been analysed through STATA 14 and the results are presented in tables 3 and 4. Table – 1 represented the raw data of the study and Table – 2 explained the growth rate of the previous year. This analysis tries to answer the question of the research that whether the independent variables like gross national expenditure, gross capital formation, gross saving, military expenditure, EXIM influence the dependent variable of the gross domestic product of Uganda. Analysis of the autocorrelation pre-test analysis expresses the relationship between the variables and is presented in Table – 3 as per the result, all variables are having a positive relationship with other variables and it articulates that further analysis can be executed and analysed as well as inferences are presented in the following paragraphs.

*Gross Domestic Product (*GDP)*:* GDP is imperative as it stretches evidence about the scope of the economy and in what way an economy is recital. The progress rate of real GDP is frequently castoff as a pointer of the overall wellbeing of the economy. Uganda GDP has increased form 2240 million USD to 45567 million USD which are the years between 1983 and 2022 (Table-1). The percentage growth rate over previous year is highly fluctuated over the period of time. It was high in the years 2008, 1986 and 1994 which are 74.01, 59.80, and 44.27 respectively. It has the negative growth rate over the previous year are -22.83, -18.93 and –18.42 in the years 1990, 1988 and 1989 respectively. Annual average growth rate of gross domestic product is 9.69. (Table – 2).

Gross National Expenditure (GNE): Gross national expenditure is the totality of household ultimate consumption expenditure, overall government ultimate consumption expenditure, and gross domestic investment and it has exceedingly influenced the gross domestic product of a nation. Gross national expenditure of Uganda has increased from 2352 million USD in 1983 to 47807 million USD in 2022 (Table – 1). Growth rate of gross national expenditure to the previous year has highest growth rate in the years 2008, 1986 and 1994 are 81.05, 69.44 and 44.91 respectively and it has also negative growth rate in the years 1990,1988 and 2015 which are -20.95, -19.22 and -13.96. Annual average growth rate of gross national expenditure is 9.77. (Table – 2).

Gross Capital Formation (GCF): Capital formation expands the circumstances and means for the manufacturing sector of a nation. Henceforth, there is considerable rise in national income and per capital income. This has led to growth in size of production which has led to yet again growth in national income. Uganda's gross capital formation has increased from 166 million USD in 1983 to 11028 million USD in 2022 (Table – 1). Gross capital formation has highest growth rate to previous year in the years 2008, 1986 and 1995 which are 101.56, 83.86 and 70.68 respectively and it has the negative growth rate to the previous year also in the years 1988 and 2014 which are -16.35 and -11.76. Annual average growth rate of gross capital formation is 13.81. (Table – 2).

*Gross Saving (*GS)*:* GS is imperative as it stretches evidence about the scope of the economy and in what way an economy is recital. The progress rate of real GS is frequently castoff as a pointer of the overall wellbeing of the economy. Uganda GS has increased form 112 million USD to 9889 million USD which are the years between 1983 and 2022 (Table-1). The percentage growth rate over previous year (1984) is highly fluctuated over the period of time. It was high in the years 2007, 1995 and 1991 which are 61.54, 52.52, and 52.41 respectively. It has the negative growth rate over the previous year are -34.51, -33.76 and –25.15 in the years 2014, 1989 and 1984 respectively. Annual average growth rate of gross saving is 15.81 which are highest among other economic variables. (Table – 2).

Military Expenditure (ME): Military Expenditure is imperative as it stretches evidence about the scope of the economy and in what way an economy is recital. The progress rate of real ME is frequently castoff as a pointer of the overall wellbeing of the economy. Uganda's Military Expenditure has increased form 94 million USD to 923 million USD which are the years between 1983 and 2022 (Table-1). The percentage growth rate over previous year is highly fluctuated over the period of time. It was high in the years 1993, 2018 and 2019 which are 66.24, 58.58, and 52.06 respectively. It has the negative growth rate over the previous year are -42.05, -31.25 and –28.86 in the years 2011, 1990 and 1991 respectively. Annual average growth rate of military expenditure is 9.18 which are lowest among the other economic variables. (Table – 2).

Exports of Goods and Services (EX): Exports are really vital to the economy since it's an intention to the people and businesses numerous marketplaces for their goods. One of the essential roles of diplomacy and overseas policy between regimes is to promote economic trade, cheering exports and imports for the advantage of all transacting nations. Export of goods and services of Uganda has increased from 194 million USD in 1983 to 5478 million USD in 2022 and it expresses the economy of the country has healthy production and the economy is on the way to tremendous growth (Table – 1). Growth rate of export of goods and services to previous year has showed in a significant manner in the years 1994, 2007, and 1993 which are 94.60, 76.13, and 53.35 respectively. It has highest negative growth rate as -25.74, -24.22 and -21.16 in the respective years 1989, 1997, and 2009. Annual average growth rate of export of goods and services is 12.66 which considerably high among other economic variables. (Table – 2).

Imports of Goods and Services (IM): Trade in goods and other services from other nations can really be beneficial to the world than purchasing local. In short, free trade has paybacks for both parties which mean that imports of

goods and services are also key to the economy of a nation. Imports of goods and services of Uganda have amplified from 306 million USD in 1983 and 10245 million USD in 2022 (Table – 1). Imports of goods and services of Uganda has highest positive growth rate to the previous year which are recorded as 89.22, 57.32, and 54,81 in the respective years 1986, 1994 and 2008 and it has highest negative growth rate as -31.74, -17.49 and -12.67 in the respective years 2015, 1988, and 1989. Annual average growth rate of import of goods and services is 11.61. (Table – 2).

Variables Influence on GDP: The macroeconomics variables influence on GDP of Uganda has been analysed in the multiple regression model (Presented in the Table – 3) as the GDP is the dependent variable and gross national expenditure (GNE), gross capital formation (GCF), gross saving (GS), gross military expenses (GME), exports of goods and services (EX), and imports of goods and services (IM) are the explanatory variables in the model. The functional form of the time-series variables can be expressed as follows:

$LogGDP_t = \beta_0 + \beta_1 LogGNE + \beta_2 LogGCF + \beta_3 LogGS + \beta_4 LogME + \beta_5 LogEX + \beta_6 LogIM\varepsilon_t$

> Where,
> > LogGDP = log of gross domestic product (in constant 2015 USD)
> > LogGNE = log of gross national expenditure (in constant 2015 USD)
> > LogGCF = log of gross capital formation (in constant 2015 USD)
> > LogGS = log of gross saving (in constant 2015 USD)
> > LogME = log of military expenditure (in constant 2015 USD)
> > LogEX = log of export of goods and services (in constant 2015 USD) and
> > LogIM = log of import of goods and services (in constant 2015 USD)

Normally, the R-square value represents the proportion of variance in the dependent variable by the explanatory variables. The estimated results offer some interesting insights that the adjusted R-square value is quite high (0.99). This value demonstrates that the independent variables explain 99 per cent of the variability of the dependent variable that is GDP in our model. Further evidences revealed that the model is good fit of the data as the F-ration is statistically significant F (6, 33) = 26888.87, $p < 0.000$). Among the independent variables, the gross national expenditure, gross saving, gross military expenditure, and the export of goods and services are significantly influencing the GDP of Uganda with positive sign. The magnitude of these variables demonstrated that a one per cent increase in gross national expenditure, gross saving, gross export of goods and services, increases the GDP at the rate of 1.18, 0.05, 0.06 percentages respectively whereas a one per cent increase in gross capital formation and, gross import of goods and services, decrease the GDP at the rate of -0.10, -0.17 percentages respectively. Hence, it is realized that the export of goods and services, saving and national expenditure are the engine of growth in the case of Uganda. Shockingly, both gross capital formation and imports of goods and services are negatively influencing the economic growth of this nation. Meanwhile military expenditure has not been influencing the GDP because the military expenditure is not gradually increasing from 1983 to 2022 as compared to other variables as per the World Bank data. The magnitude of imports is very high than that of the gross capital formation besides heteroscedasticity analysis expresses that chi-square value is smaller than that of probability value which confirmed the validity of multiple regression analysis. This trend can be attributed to the repercussion effect of imported goods on the domestic industries, which in turn pull-down the economic growth of the nation and overall analysis expressed better performance for 1983 to 2022. Hence, the policymakers of this nation should carefully design the development policies by considering the above-mentioned issues.

Table – 1. Economic Variables of Uganda from 1983 to 2022 (Million USD)

Year	GDP	Gross National Expenditure	Gross Capital Formation	Gross Savings	Military Expenditure	Exports of Goods and Services	Imports of Goods and Services
1983	2240	2352	166	112	94	194	306
1984	3616	3682	294	266	75	459	518
1985	3520	3596	307	199	105	484	528
1986	3923	4075	331	201	131	503	598

1987	6270	6905	609	193	131	517	1131
1988	6509	7198	702	279	141	493	1157
1989	5276	5815	588	295	140	420	955
1990	4304	4872	547	195	107	312	834
1991	3322	3851	504	245	74	248	729
1992	2857	3320	455	374	52	250	694
1993	3220	3512	491	516	63	227	682
1994	3990	4269	586	753	104	349	762
1995	5756	6186	714	865	127	679	1199
1996	6045	6614	1219	1320	135	723	1416
1997	6269	6527	1140	1519	140	838	1304
1998	6585	7271	1083	1242	155	635	1344
1999	5999	6666	1173	1055	160	735	1426
2000	6193	6902	1207	889	141	660	1369
2001	5841	6559	1127	851	136	673	1391
2002	6179	7072	1249	1027	142	693	1549
2003	6607	7517	1386	1176	152	752	1665
2004	7939	8727	1599	1663	196	1008	1807
2005	9239	10208	2065	1926	217	1310	2293
2006	9978	11262	2108	1748	219	1524	2829
2007	11903	13479	2628	2000	252	1991	3577
2008	14440	15552	3318	3231	312	3506	4618
2009	25128	28156	6688	4448	294	4677	7149
2010	26673	29837	7230	4986	609	3687	6520
2011	27872	31749	7457	4623	607	3583	7497
2012	27306	30425	7148	5063	352	4230	7648
2013	28916	32278	9246	6498	300	4775	7690
2014	32612	33691	8758	8199	326	4875	6870
2015	32387	35485	7728	5370	306	4171	8036
2016	29204	30533	7422	7066	319	3629	5485
2017	30744	31825	7567	7255	347	5122	6203
2018	32927	34661	8011	7023	408	4968	7096
2019	35348	37285	9024	8019	648	6048	7866
2020	37605	39478	9107	8205	985	5797	8117
2021	40510	42994	9757	7964	1067	6393	10505
2022	45567	47807	11028	9889	923	5478	10245

Source: World Bank, 2023.

Table – 2. Economic Variables of Uganda from 1983 to 2022 (Percentage Growth rate over Previous Year)

Year	GDP	Gross National Expenditure	Gross Capital Formation	Gross Savings	Military Expenditure	Exports of Goods and Services	Imports of Goods and Services
1984	-2.65	-2.33	4.43	-25.15	39.36	5.37	1.99

1985	11.47	13.32	7.83	0.82	25.05	3.93	13.17
1986	59.80	69.44	83.86	-3.89	-0.08	2.88	89.22
1987	3.82	4.25	15.29	44.37	7.58	-4.67	2.29
1988	-18.93	-19.22	-16.35	5.84	-0.77	-14.85	-17.49
1989	-18.42	-16.22	-6.94	-33.76	-23.47	-25.74	-12.67
1990	-22.83	-20.95	-7.84	25.52	-31.25	-20.45	-12.59
1991	-13.98	-13.78	-9.62	52.41	-28.86	0.97	-4.75
1992	12.70	5.78	7.80	37.90	19.69	-9.15	-1.74
1993	23.91	21.53	19.33	45.98	66.24	53.35	11.75
1994	44.24	44.91	21.94	14.95	21.97	94.60	57.32
1995	5.02	6.91	70.68	52.52	6.61	6.52	18.09
1996	3.72	-1.31	-6.53	15.10	3.12	15.84	-7.91
1997	5.03	11.39	-4.97	-18.24	10.81	-24.22	3.04
1998	-8.90	-8.32	8.28	-15.08	3.23	15.79	6.13
1999	3.25	3.55	2.90	-15.70	-11.52	-10.24	-4.03
2000	-5.70	-4.98	-6.58	-4.33	-3.64	1.98	1.62
2001	5.79	7.83	10.80	20.69	4.43	2.99	11.35
2002	6.93	6.28	10.99	14.58	7.17	8.59	7.51
2003	20.17	16.10	15.37	41.37	28.64	34.00	8.55
2004	16.37	16.97	29.13	15.81	10.54	29.96	26.86
2005	7.99	10.33	2.08	-9.22	0.86	16.34	23.41
2006	19.29	19.68	24.67	14.42	15.37	30.61	26.42
2007	21.32	15.38	26.24	61.54	23.69	76.13	29.10
2008	74.01	81.05	101.56	37.64	-5.88	33.40	54.81
2009	6.15	5.97	8.10	12.10	107.37	-21.16	-8.79
2010	4.49	6.41	3.15	-7.27	-0.25	-2.83	14.99
2011	-2.03	-4.17	-4.15	9.51	-42.05	18.06	2.02
2012	5.90	6.09	29.35	28.33	-14.71	12.88	0.55
2013	12.78	4.38	-5.28	26.18	8.53	2.10	-10.67
2014	-0.69	5.32	-11.76	-34.51	-5.99	-14.45	16.97
2015	-9.83	-13.96	-3.95	31.59	4.05	-12.98	-31.74
2016	5.27	4.23	1.96	2.68	8.86	41.14	13.09
2017	7.10	8.91	5.86	-3.21	17.77	-3.02	14.40
2018	7.35	7.57	12.65	14.18	58.58	21.74	10.84
2019	6.39	5.88	0.91	2.33	52.06	-4.15	3.20
2020	7.72	8.91	7.15	-2.94	8.31	10.28	29.42
2021	12.48	11.19	13.02	24.18	-13.45	-14.31	-2.48
AAGR	**9.69**	**9.77**	**13.81**	**15.81**	**9.18**	**12.66**	**11.61**

Source: World Bank, 2023.

Table – 3. Auto Correlation Result for Economic Variables

	LOGGDP	**LOGGNE**	**LOGGCF**	**LOGGS**	**LOGME**	**LOGEx**	**LOGIm**
LOGGDP	1.0000						
LOGGNE	0.9942	1.0000					

195 |

LOGGCF	0.9681	0.9754	1.0000			
LOGGS	0.9332	0.9274	0.9621	1.0000		
LOG ME	0.9587	0.9610	0.9447	0.9176	1.0000	
LOGEx	0.9580	0.9520	0.9645	0.9520	0.9439	1.0000
LOGIm	0.9546	0.9690	0.9837	0.9396	0.9465	0.9557	1.0000

Source: Calculation based on the data of World Bank, 2023

Table – 4. Result of the Multiple Regression Analysis Model

Source	SS	df	MS	Number of obs = 40		
				F(6, 33) = 26888.87		
				Prob > F = 0.0000		
Model	6.26583344	6	1.04430557	R-squared = 0.9998		
Residual	0.001281649	33	0.000038838	Adj R-squared = 0.9998		
Total	6.26711508	39	0.160695259	Root MSE = .00632		
LOGGDP	**Coef.**	**Std. Err.**	**T**	**P>|t|**	**[95% Conf. Interval]**	
LOGGNE	1.177573	0.0263384	44.71	0.000***	1.123987	1.231159
LOGGCF	-0.0991624	0.0292297	-3.39	0.002***	-0.1586306	-0.0396942
LOGGS	0.0541638	0.0104013	5.21	0.000***	0.0330022	0.0753254
LOGME	0.0002604	0.0090597	0.03	0.977^{NS}	-0.0181716	0.0186925
LOGEX	0.0605829	0.0122896	4.93	0.000***	0.0355794	0.0855864
LOGIM	-0.1675263	0.0261849	-6.4	0.000***	-0.2207999	-0.1142526
_cons	-0.3852452	0.0805306	-4.78	0.000***	-0.5490859	-0.22114044
		Result of Breusch-Pagan Test				
Breusch-Pagan / Cook-Weisberg test for heteroskedasticity						
		Ho: Constant variance				
		Variables: fitted values of GDP				
		chi2(1) = 0.14				
		Prob > chi2 = 0.7102				

Source: calculation with World Bank data, 2023 by STATA-14
Note: *** refers significant at 1% level while NS is not significant.

8. Conclusions

This study attempts to assess the trend of Uganda's economy over the last four decades. To carry out this research, time series data on macroeconomic factors like gross domestic product, gross national expenditure, gross capital formation, gross saving, military expenditure, exports and imports of goods and services were obtained from the World Bank's World Development Indicators. The phenomenon of these macroeconomic factors revealed a discernible improvement between 1983 and 2022. The annual average growth rate of these macroeconomic factors revealed that gross saving, gross capital formation, followed by exports and imports, and has experienced remarkable growth. Furthermore, our regression model clearly shows that gross national expenditure, gross saving and export of goods and services contributed significantly to Uganda's GDP growth during the study period. At the same time, both gross capital formation and imports of goods and services have been interfering with this country's economic growth. As a result, it is recommended that policymakers strive to use capital in areas that generate multiplier effects. Furthermore, it is recommended that the country's import policy be rephrased because it has a negative impact on the country's economic growth.

References

1. Phillips, R. J., & Cutler, H. (1998), Domestic Exchange Rates and Regional Economic Growth in the United States, 1899-1908: Evidence from Cointegration Analysis. The Journal of Economic History, 58, 1010-1026. https://doi.org/10.1017/S0022050700021707
2. Islam, R. (2010). The Challenge of Jobless Growth in Developing Countries: An Analysis with Cross-Country Data. BIDS Occasional Paper Series No. 1, Dhaka: Bangladesh Institute of Development Studies: Dot Printing and Packaging.
3. PWC (2017). Price Water Cooper Annual Report, 2017-2018.
4. Nkurunziza, J. D., & Bates, R. H. (2004). Political Institutions and Economic Growth in Africa. Working Paper, No. 98, Center for International Development, Harvard University.
5. Solow, R. M. (1956). A Contribution to the Theory of Economic Growth. Quarterly Journal of Economics, 70, 65-94. https://doi.org/10.2307/1884513
6. Barro, R. J., & Sala-i-Martin, X. (2003). Economic Growth (2nd ed.). Cambridge, MA: MIT Press.
7. McQuinn, K., & Whelan, K. (2007). Solow (1956) as a Model of Cross-Country Growth Dynamics. MPRA Paper No. 5892, Central Bank of Ireland. http://mpra.ub.uni-muenchen.de/5892/
8. World Bank (2018). "Uganda Economic Update, 10th Edition, December
9. 2017: Accelerating Uganda's Development, Ending Child Marriage, Educating Girls" Washington, DC: World Bank Group.
10. European Union. (2022). *Decent work and the informal economy - ILO 2002*. France: European Union
11. Snyder, Margaret (2000). *Women in African Economies: From Burning Sun to Boardroom*. Kampala: Fountain Publishers Ltd. pp. 5–6. ISBN 9970-02-187-7.
12. Okurut, F. N.; Schoombee, A.; Berg, S. Van Der (2005). "Credit Demand and Credit Rationing in the Informal Financial Sector in Uganda1". *South African Journal of Economics*. 73 (3): 482–497.
13. John Aglionby (2017). "Uganda's oil reserves bring promise of work and infrastructure" . The Financial Times. London. 2022-12-10.
14. CARE International 2002). "Economic cost of the conflict in Northern Uganda" New York City: ReliefWeb.
15. World Bank. (2018) "World Development Indicators" Washington, DC: World Bank Group.
16. Baten, Jörg (2016). A History of the Global Economy. From 1500 to the Present. Cambridge University Press. pp. 332–334. ISBN 9781107507180.
17. WTO (2018). "Uganda and the WTO" Geneva: World Trade Organization (WTO).
18. World Bank. (2007). "Uganda Moving Beyond Recovery: Investment and Behavior
19. Change, For Growth". Country Economic Memorandum.Report No. 39221-UG. Poverty
20. Reduction and Economic Management Unit, Africa Asia Region.
21. Didas, T. (2017). Factors Affecting Economic Growth in Uganda (1994-2016). A dissertation submitted to the College of Business and Management Sciences, Kampala: Makerere University.
22. Kenganzi, J. (2018). Factors Affecting Uganda's Economic Growth: An Autoregressive Distributed Lag Approach. Masters Research Report, Kampala: Makerere University.
23. James, Mukoki, Hisali Eria, and Mukisa Ibrahim, (2023). Inter-sectoral linkages and economic growth in Uganda: A SAM-based multiplier model analysis. *Cogent Economics & Finance* 11: 2243167.
24. [21]. Rumanzi, R. I., Turyareeba, D., Kaberuka, W., Mbabazize, R. N., & Ainomugisha, P. (2021). Uganda's Growth Determinants: A Test of the Relevance of the Neoclassical Growth Theory. Modern Economy, 12, 107-139.
25. World Bank (20240 Country data: Uganda. Geneva: the World Bank. https://data.worldbank.org/country/uganda