The Impact of General Government Final Consumption Expenditure - Economics Growth nexus for the Gambia

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Abstract

Traditional Keynesian macroeconomic approaches states that extraordinary levels of government consumption expenditure increase employment levels of the population, productivity and investment levels through investment multiplier effects on aggregate demand. Thus, the spending of the government increases also raises aggregate demand to the right, causing output to increase depending on the magnitude and efficiency of expenditure multipliers on growth. The focus of this paper is to examining the impact of general government final consumption expenditure- economic growth nexus for the Gambia for the periods from 1977 to 2017. The econometrics techniques used is Ordinary Least Square (OLS) method to explore the impacts either negative or positive effects of government consumption final expenditure on growth in the Gambia for the periods under study Data for the study were obtained from World Bank(WDI). The findings were interpreted based on a 5 percent significance level of alpha. The multiple regression result revealed that government consumption was not a significant impact on the economic growth of the Gambia. This opposes the traditional Keynesian macroeconomic theory. This study suggested that Capital and recurrent expenditures on economic facilities should be directed mainly to productive economics. This will stimulate activities in the economic sectors like agriculture, industry and services, that will perhaps contrary the undesirable effect of government expenditure on economic growth especially in the Gambia in which the time series study was based.

Keywords: The Gambia, Government Expenditure, OLS, Traditional Keynesian macroeconomics, Aggregate Demand, Economics Growth.

1. Introduction

The west African smallest country's is a subtle country's. It bounces 450 km sidelong of the river Gambia. Its area is 10, 689 sq. km surrounded three sides by republic of Senegal, but for a 60 km Atlantic Ocean front.

The population of the Gambia is almost 2.1 million peoples' with population density of 176 persons per square kilometer. The 57% of the population is focused in the urban areas. The size of the economy is very small with mostly depending agriculture for the survival, which is affected by climate change and environmental pollution. The personal remittances received , and is susceptible to external shocks of the back-way syndromes', which killed and continuing killing the youthful population in the Gambia. Gross domestic product growth was projected at 6.6% in 2018, determined by robust recovery in tourism and trade, and construction, as well as developments in electricity supplied especially in the rural area of the Gambia. The amount of visitors touched a record high and increased by 26% in 2018 related to 2017. In the same vein, credit to private sector recovered powerfully. The background of macroeconomics remains to be branded by extraordinary debt. The important progress facing The Gambian's economy are connected to its unstable, small internal market that is inaccessible to small scale industries, access to capitals is incomplete, that make the work for the vulnerable youth especially

women to have financial planning and credit facilities, and insufficient essential skills to build foundations for the youthful population, high populations growth rate and private sector job formation are inadequate to fill the gaps for the youth and the whole population as a whole(Worldbank.org).

This paper will fill the gaps the GDP- final consumption expenditure nexus for the time by using multiple regression model for the Gambia. Government final consumption expenditure acquired by government in its creation of non-market final goods and services and marketable goods and services provided as social transfers. The marginal effects collective in consumption is in some cases not clear. The spending on the administration in a group of hospitals are documented as individual. Final general government consumption purchasing can be categorize into two major groups. Firstly that reflects expenses for collective consumption (defense, justice, etc.) which benefit society as a whole, or large parts of society, and are often known as public goods and services. Secondly that relates to spending of the specific consumption reflecting the costs acquired by government on behalf of the individual household levels. This class of spending is equalvalent to social transfers in kind from government to households and it includes expenses by government on marketable goods and services on condition that to households. Goods and services that are produced by government typically do not require a market price for it production, the relevant factors of products are valued at the amount of prices needed to produce those goods and services. These are costs largely entail the recompense of personnel, intermediary consumption and devaluation. The ultimate consumption of government is estimated as the rate of change of government output and payments made by goods and services produced by government..

2. Literature Review

According to Ram (1986) using data on cross sectional analysis for a larger sample of 115 countries for a periods of 1960 to 1980. The empirical evidence applied the Ordinary least squared estimations and the AR1 model for some countries, Thus, influence of government size on economy growth is positive in the development areas such as agriculture, service and industry sectors. Mitchell ,2005 did a studied on the inclination of government expenses and growth of the United States with 15 countries in European Union. He found out that the extension lead of government expenditure unnecessarily incline to progress economic activities. For the 15 EU countries, Romero-Ávila and Strauch (2008) revealed that government size is measured by the segment of entire expenditure, consumption expenses, government incomes generated, its consequence on economic growth would be destructive. For Davies (2009) in his part used Human Development Index (HDI) instead of economic growth rate to determine the optimal level of the government.

Considering 154 countries for seven years and classifying the countries into two clusters. The results he revealed are optimal share of consumption and investment are 17 and 13 percent, respectively and the optimal government size in these countries is 30%, which is larger than the optimal government size of economic growth. The studied done by Fan and Rao (2003) examined the influence of different kinds of government purchases on Gross domestic growth for cross countries analysis of 43 underdeveloped from 1980 to 1998 using time series approaches and that the outcome was mixed results from the regression. For the developing countries especially Africa, expenditure on public goods such as agriculture- health nexus was strong indicators for promoting economic growth and development in this regions. The government expenditures on agriculture, education, and defense added significant values to economic growth in Asia regions. For the Latin America such as Caribbean, the health expenses positive significant impacts on growth-promoting effect. According to Gupta et al. (2005) evaluating the effects of expenditure composition- economic growth nexus for a sample of 39 low income countries in the world, revealed that those countries their costs are focused on the earnings that lower growth. Those that allot advanced portion to capital and no wage of goods and services for cutting their existing expenses on growth. In dissimilarity, contrasting to the general prospects, relating to co-integration and error correction model approaches for Indian setting, according to Tulsidharan (2000) found out that the highest the economic growth constantly accompanied by an increase in government final consumption expenditure.

3. Material and Method

This research paper is driven by the need to test and know the effect of Government Consumption on the economic growth of the Gambia. This section of the paper shows the data sets, sample size and variables definition. The study focuses on annual time series data from 1977-2017. In this paper we used secondary data retrieved from World Bank development indicators (WDI). This paper extracted the given data, interpreted as well as tested it and derived a conclusion to the topic. The data set was examined by applying the OLS multiple regression technique using Stata. This technique was also used by Fan and Rao (2003) and Al Gifari Hasnul (2015). The result expected that the Keynesian theory and endogenous growth theory to be incorporated into the economy of the Gambia, which claim that larger government expenditure can hasten the economic growth of this

country, the Gambia.

$$GC = \delta_0 + + \delta_1 S + \delta_2 Int + \mu_1$$

Where,

GC = annual rate of General Government final Consumption expenditure

S = annual rate of gross savings

Int = annual interest rate spread

δ_2 = is the coefficient of the annual interest rate spread(Int)

$$GDP = \beta_0 + \beta_1 GC + \beta_2 S + \beta_3 Int + \mu_2$$

Where,

GDP = Gross Domestic Product

4. Results and Discussion of Finding

The fiscal policy of the Gambia declined as the fiscal shortfall amplified to 6.2 out of a hundred in 2018 (from 5.0% in 2017), mostly outstanding to inferior grant incomes (by 4.4% of GDP) and unbudgeted transfers to State-Owned Enterprises (SOEs). This directed to a severe rise in disposable local borrowing from -0.7% of GDP in 2017 to 3.4% in 2018. The background of macroeconomic remains to be categorized by high levels of debt. According to (Worldbank.org),successive governments in the Gambia over time had initiated various fiscal and monetary policies with a view to consequently bring about improved economic growth. From the results, it has shown that government consumption is directly related to gross savings and inversely related to interest rate. Most macroeconomic models implies that increase in government spending causes interest rate to rise because of crowding out effect where large volumes of government borrowing push up the real interest rate making it difficult for private investors to obtain loans. Crowding out generally takes effect when the interest rate level reaches a point at which only the government can afford to borrow, as a result of which smaller scale companies are forced (crowded) out of the market. But the results above for the Gambia contradict that statement because being inversely related means that as government consumption expenditure increases, the interest rate will decrease and vice versa. However, from the t-statistics value from table 4.1, interest rate spread and gross savings did not significantly affect government consumption using the 5 per cent significance level. According to the results, it is true that the variables do relate and affect each other since the F calculated (F= 11.83) is significant using the 5 per cent significance level. So therefore we can use these variables together as explanatory variables to determine the impact of general government final consumption expenditure on the GDP of the Gambia. According to the results evaluated, it is obvious that gross domestic product (GDP) is negatively connected to government expenditure and interest rate but positively related to gross savings formation for the economy. Following the Keynesian theory, we were expecting GDP to be positively related to the general government final consumption expenditure in the Gambia, but the reverse happened. The Keynesian theory claims that larger expenditure on government increases economic growth does not work in the Gambia. This is due to the fact that the economy of the Gambia must tackling the sectors that contribute to the development of the country. The relationship between government consumption expenditure with GDP or proxy economics growth is described by the negative coefficient value (-0.152). Which means, an growth in general government final consumption expenditure will brought about a 15 percent reduction of GDP of the Gambia. The corresponding t-statistic value of -0.655 which is far smaller than the theoretical value of 1.96, using the 5 percent significance value indicated that general government final consumption expenditure has insignificant effect on the GDP of the Gambia for the period under review The results presented in the above Tables means that general government final consumption expenditure related positively and non-significantly with economic growth measured by the GDP growth rate of the Gambia during the period studied. This finding implies that a unit change in general government final consumption expenditure do brought about reduction of 15 percent change in the growth rate of gross domestic product in the Gambia. This finding disagrees with the Keynesian economic theory which specified that greater government expenditure can hasten economic growth. It also disagrees with Gupta et al. (2005), Ram (1986), Davies (2009) but agrees with Mitchell (2005), Romero-Ávila and Strauch (2008), Fan and Rao (2003).

5. Conclusion and Policy Recommendation

These studies have used different theories in specifying the model as well as different research methodologies to figure out the relation between government consumption spending and economic growth nexus. As the result generated, the effect of government expenditure on economic growth have granger casuality effects. Can be direct, indirect, bidirectional effects on economic growth. Generally, the OLS regression models showed that government purchases on economic growth have a destructive negative correlations. Additionally, this study found a contradictory relationship between government expenditure and economic growth. We were expecting them to be positively related just like the Keynesian theory states but that did not happen. so this means that certain policies need to be reviewed in order to help solve this issue. This study suggests the following recommendations, among others:; Capital and recurrent expenditures on economic services should be directed mainly to productive economic activities. This will stimulate activities in the economic sectors and, perhaps, reverse the negative effect of government expenditure on economic growth. Youth empowerment and development must be central to the government policies since they contribute immensely toward the development of the country. Local production should also be encouraged. Majority of the goods consumed in the Gambia are imported and the costs are higher compared to when it is produced in the country. The tax of goods must not be very expensive as this would discourage investors. The policy recommendation for further research on government consumption expenditure on growth depending more on public expenditure and private contribution but associate with lower rainfall, political and institutional factors instability , foreign direct investment and loan or grants from international donors to investigate the main causes of growth in the Gambia and Africa in general.

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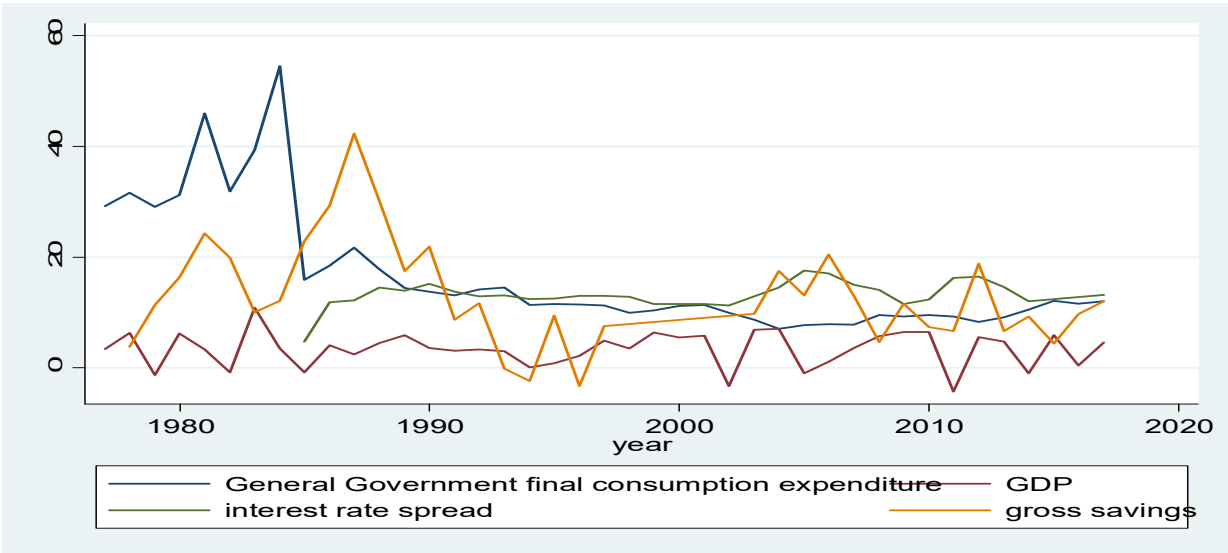
Appendices

Figure 1.

Year	GDP	Gross savings	Interest Rate spread	General Government final consumption expenditure
1977	3.439576			29.24364
1978	6.316446	3.805367		3.805367
1979	-1.32818	11.3828		29.09632
1980	6.27008	16.35503		31.21235
1981	3.321894	24.29007		45.95932
1982	-0.76458	19.86784		31.90135
1983	10.88323	10.0415		39.36434
1984	3.535257	12.13718		54.51542
1985	-0.81226	22.8808	4.733333	15.93378
1986	4.091071	29.35008	11.875	18.44663
1987	2.454333	42.29748	12.16667	21.70681
1988	4.476827	30.11467	14.54167	17.82051
1989	5.895722	17.45713	13.91667	14.41997
1990	3.558879	21.85368	15.16667	13.74735
1991	3.107039	8.751021	13.79167	13.08165
1992	3.378689	11.70373	12.91667	14.1633
1993	3.012101	-0.15819	13.08333	14.53865
1994	0.154346	-2.3392	12.41667	11.35234
1995	0.881848	9.453124	12.54167	11.566
1996	2.223546	-3.31157	13	11.43612
1997	4.899999	7.538923	13	11.26524
1998	3.499999		12.875	9.990393
1999	6.399999		11.5	10.33801
2000	5.5		11.5	11.2272
2001	5.8		11.5	11.36684
2002	-3.25		11.29167	9.922902
2003	6.87	9.793369	12.91667	8.754974
2004	7.05	17.52112	14.5	7.105651
2005	-0.94168	13.09227	17.58333	7.725466
2006	1.1241	20.45564	17.08333	7.933507
2007	3.631026	13.04683	15.025	7.828176
2008	5.734642	4.664122	14.13333	9.55104
2009	6.449696	11.5948	11.5	9.306774
2010	6.526297	7.404641	12.375	9.565978
2011	-4.29512	6.617839	16.25	9.279819
2012	5.599761	18.81737	16.5	8.306282
2013	4.788922	6.656056	14.56417	9.093973
2014	-0.94024	9.291539	11.98917	10.50726
2015	5.868248	4.435661		12.08662
2016	0.405597	9.690634		11.57627
2017	4.557732	12.04452	13.225	12.01121
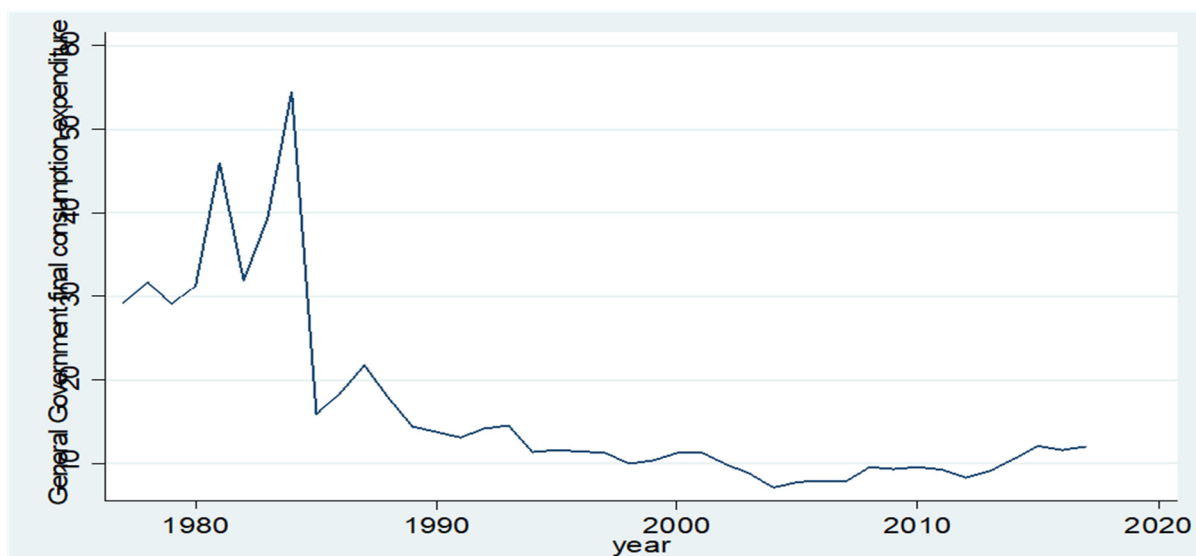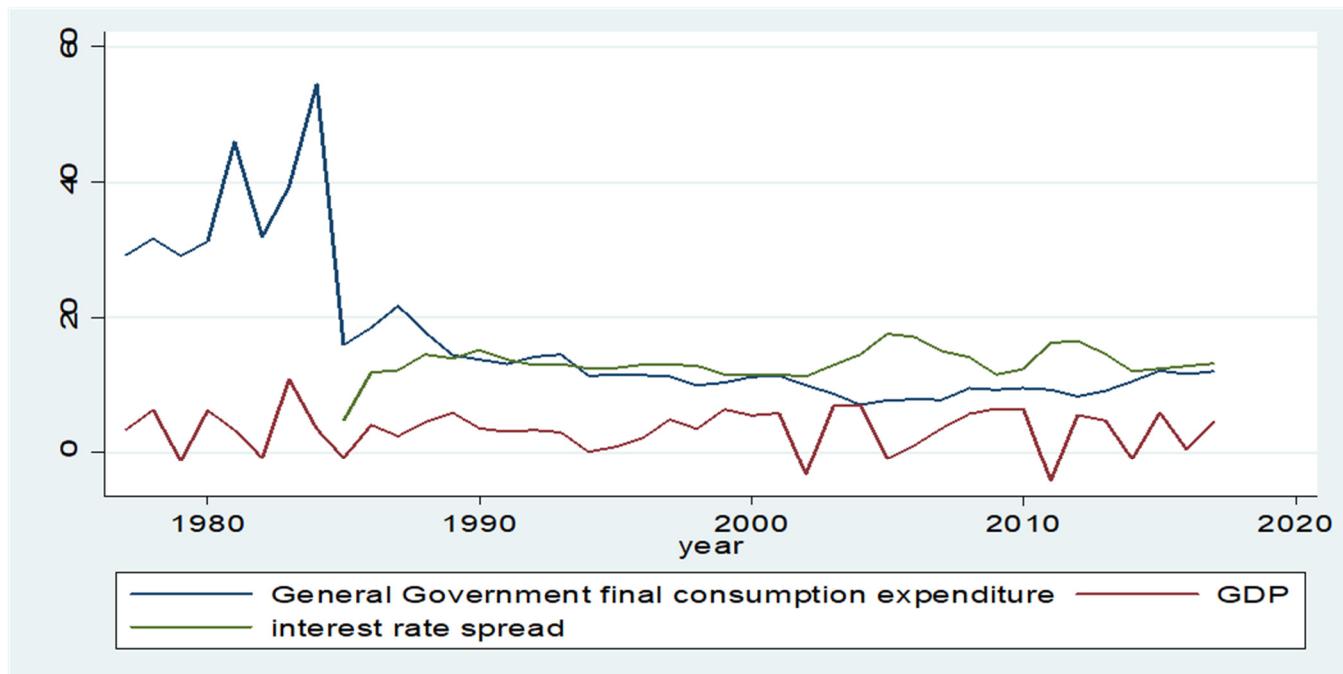
Time Series Graph By General Governmen Final Consumptiont Expenditure from 1977-2017
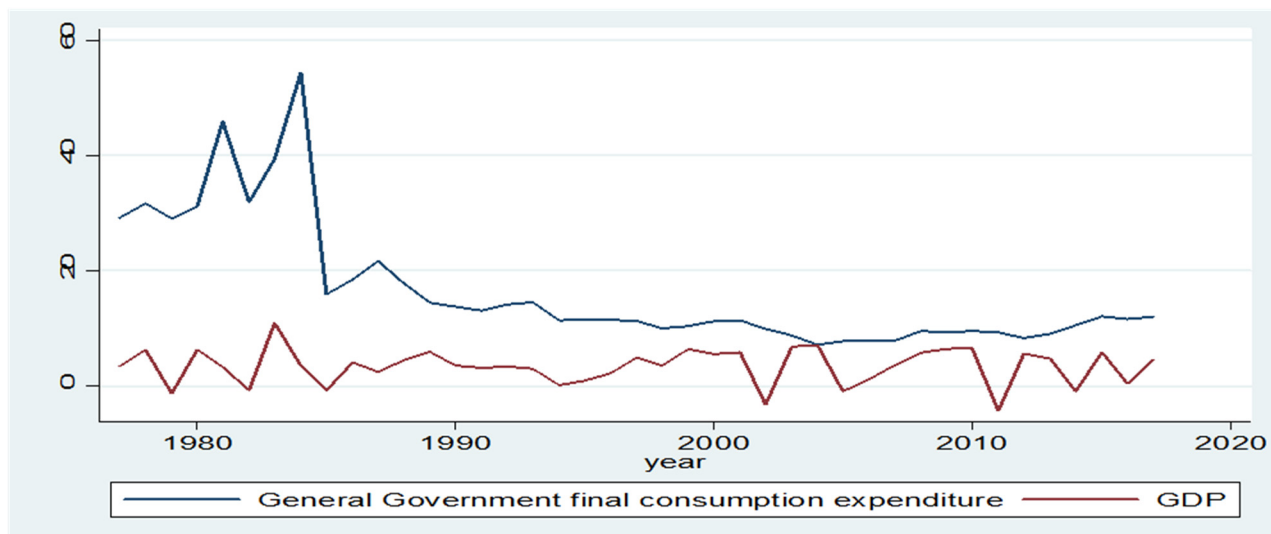
Model		Unstandardized Coefficients				95.0% Confidence Interval for B	
		δ	Std. Error	T	P>|t|	Lower Bound	Upper Bound
	Gross Savings	0.197	0.053	3.744	0.001**	0.088	0.306
	Interest Rate Spread	(0.634)	0.224	(2.827)	0.010*	(1.098)	(0.170)
	(Constant)	17.709	3.201	5.533	0.000***	11.088	24.330

a.   Dependent Variable: General Government Final Consumption Expenditure

Standard errors between parentheses

* p=0.10, ** p=0.05, *** p=0.01

Source: Own Computation from WDI Data by using Stata

| Model | | Unstandardized Coefficients | | t | P>\|t\| | 95.0% Confidence Interval for β | |
		β	Std. Error			Lower Bound	Upper Bound
	Gross Savings	0.055	0.074	0.745	0.464	(0.099)	0.210
	Interest Rate Spread	(0.045)	0.289	(0.155)	0.878	(0.645)	0.555
	General Government Final Consumption Expenditure	(0.152)	0.232	(0.655)	0.519	(0.633)	0.329
	Constant	4.868	5.432	0.896	0.380	(6.399)	16.134

a. Dependent Variable: GDP

Source: Own Computation from WDI data using Stata

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