

ANALYSING FISCAL POLICY AND ECONOMIC GROWTH: INSIGHT FROM THE GAMBIA

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ABSTRACT

This study uses the Autoregressive Distributed Lag model to investigate how fiscal policy influences economic growth in the Gambia. Findings confirm the significant relationship between fiscal policy rate and economic growth in both the short and long run, and gross fixed capital formation exhibits a negative and statistically significant relationship with economic growth. Additionally, the impact of public debt in the short term was non-significant but substantial in the long run. Furthermore, government expenditure substantially impacts growth in both the short and long run, and the causality test proved that the variables show a one-way causation on economic growth. The study recommends that policy-making decisions to pay attention to policies that will intensify the efficiency of fiscal policy rates to support and expand the rate of growth. Tax policy arrangements and implementations should be reviewed, and the accrued revenue should be reinvested into areas that will improve human capital and infrastructure development. On public debt, the focus should be on productive or tied to investments that will generate high returns at a reasonable payback period to avoid debt overhang.

Keywords: Fiscal policy, Government expenditure, Taxation, Debt, Economic growth

JEL Classification: E62; H2; H43

1. INTRODUCTION

The Gambia's economic landscape has been associated with fluctuations in growth rates and public finance bottlenecks. Fiscal policy is essential in addressing these systemic vulnerabilities emanating from government spending, taxation, and budget management.

The small West African country relies on tourism, taxation, remittances, and agriculture to invigorate economic activity and enhance public welfare. There's a lack of consensus from empirical evidence on the efficacy of the policy as a device for stabilizing the economy. Given that the economy rises and falls, the policy may stimulate the growth in Gross Domestic Product (GDP), reduce the rate of price changes, and improve the accumulation in the level of savings and foreign reserves as well as a stable foreign exchange rate of the domestic currency (Ajisafe and Folorunso, 2002).

Remittances from migrants are also a significant source of the economy's external financing, accounting for 11.5% of GDP in 2019 (World Bank, 2023). However, the consequence of past fiscal policy and high domestic borrowing continues to hinder private sector growth. The average GDP percentage of bank lending to the private sector was 8.7%, the second lowest in

West Africa (AfDB, 2020). According to the World Bank (2018), the most significant barrier to the business climate is that more than half of Gambian Small and Medium Enterprises (SMEs) have limited access to financing.

The unstable trend in global growth continued as a concern for the Gambia, weakening the demand for their exports and tourism over time and deteriorating consumers' and investors' sentiments in the economy's main export markets of Europe due to rising risks. In terms of economic recovery, government revenues increased to 17.3% of GDP in 2019 from 13.1% in 2016, mainly due to growth in tax administration efficiency and fiscal deficit decreased from 6.4% of GDP in 2016 to 4.1% of GDP in 2019 owing to fiscal unification, which also contributed to cutting overall expenditures from 24.3% of GDP to 21.4% of GDP. A rebound in capital and financial inflows has also occurred, rising from 4.3% of GDP in 2016 to 15.2% in 2017 (African Development Bank, 2020). This could result from investors restoring faith in the economy due to the democratic political change that may have given rise to the changes in fiscal approach. Despite the adjustment, the government's efforts to implement inclusive fiscal measures and enhance revenue mobilization to address socio-economic challenges of poverty, unemployment, and structural inequalities through growth are still unattained due to their external debt distress risk, which has remained high over time.

The rising profile of The Gambia's indebtedness is alarming and presents unique challenges in fiscal management. The country's total public debt to GDP stood at about 84 percent, and external debt to GDP at about 52 percent (World Bank Group, 2023). This indebtedness comprises concessional and semi-concessional loans from multilateral and plurilateral creditors. However, within the Gambian context, the impact of fiscal policy instruments in accelerating sustainable economic growth dynamics is still underexplored. Also, the financial deficit decreased from 4.9% of GDP in 2022 to 3.5% in 2023 due to expenditure restriction and ameliorated customs revenues, but tax income continues to be low at 9.8% of the GDP. The current account deficit worsened from 6.1% of GDP in 2022 to 7.6% in 2023, influenced by weak agricultural exports and increased cost of imported commodities (African Economic Outlook, 2024).

Understanding the connection between fiscal policies and economic advancement, including taxation efficiency, aggregate government expenditure, public debt, stability, and other factors such as infrastructure investments, and how these decisions impact the economic output in the Gambia, provides useful insight into the development strategies of other emerging economies. The objective of this paper is to investigate the effect of fiscal policy on economic growth and determine the direction of causality between fiscal policy and economic growth in the Gambia

2. LITERATURE REVIEW

2.1 Theoretical Literature

The growth model independently developed by Solow and Swan (1956) analysed the production function in the form $Y = t - F(K-t, L-t, A-t)$, where A represents technology or efficiency, L is labour, K is capital, and Y is the output. The fundamental component of Solow's standard growth model assumes that what characterises F is a declining return to each input, a constant return to scale, and a positive and continuous elasticity of substitution. The capital stock's progression to a steady rate of depreciation and savings produced the fundamental dynamic equation of the neoclassical growth model.

2.2 Empirical Literature

There have been extensive empirical studies with different strands on the correlation between fiscal policy and economic growth. Studies such as Stoilova and Todorov (2021) inferred a

lowering of direct tax revenue to GDP in European Union states. They found that the output growth in the new member states of the union is affected negatively by direct tax but positively related to economic development in the other euro area. In the sub-Saharan African countries, the investigation conducted by Daba-Ayana (2022), through a systematic review but preoccupied with the relationship, found countries in the sub-region as more interested in fiscal policy as a tool of economic growth rather than stabilization. Other research embarked on fiscal regional integration by Makhoba and Kaseerem (2022) on debt and fiscal policy in the Southern African Development Communities (SADC) applied both random and fixed effects to determine their validity. Their findings showed how capital formation negatively affects growth, government spending, employment, and public debt instability.

Studies such as Muinelo-Gallo and Roca-Sagales (2011), Gbadebo and Mohammed (2015), and Comlan (2017) agreed that fiscal policy affects economic growth. As reported by them, larger taxes and their structures and current public expenditure may affect economic growth, but it depends on whether or not the increases in investment diminish other variables without negatively affecting output. In contrast, not all government spending stimulates economic growth in the long run. Daoudi (2023) found in Algeria that while spending positively influences economic growth, this effect is minor and only in the short run. However, in the medium and long term, it negatively impacts growth. This suggests that taxation has a restricted role in propelling economic growth.

Research on public spending has produced mixed results. Kentikelenis et al. (2016) examined the growth of public spending for a panel of thirty developing nations on the sectoral expenditures formula that uses a disaggregation approach. The results demonstrate a substantial relationship between growth and government investment at the sectoral level. Additionally, variables like investment and spending in other sectors do not hold up due to budget constraints. Also, there was a strong and positive correlation between economic growth and the GDP share of private investment. In Nigeria, Studies on investment through capital accumulation for public spending stability and growth, Orji and Mba (2010) found that private investment hinders capital formation but determines economic growth. On financial stability, Anthony-Orji et al. (2022) discovered that investment has a notable positive relationship with financial stability in Nigeria. In South Africa, Makhoba et al. (2019) found that gross fixed capital formation and income positively impact growth. In contrast, spending by the government and debt showed an opposite relationship, with government spending rising faster than revenue. Ayalogu et al. (2023) investigated government spending on education for SANE countries, that is, South Africa, Algeria, Nigeria, and Egypt revealed that spending patterns on education and enrolment rates in public primary and secondary schools have a positive and significant link. Also, sound policy interventions, acceleration of aggregate income, and fulfillment of aid promises by the international community to the area can help move these countries toward sustained goals.

Some empirical side findings advocate for tax increment and contracting foreign loans without considering their effect on investments and the risk related to debt servicing or repayment regimes. External borrowing is used to supplement domestic savings, and the choice is apt if the acquired funds' rate of return produces a higher repayment of borrowed funds. Khanal (2024), on Nepal's fiscal policy on growth, found that increasing government tax and foreign loans produce a multiplier effect on GDP. In advocating for tax creation, however, there is a need for a spending plan and proper use of loans to protect the productive sectors.

Studies in the Gambia, such as Onwioduokit and Bassey (2014), Jallow (2022), and Carrasco et al. (2022), produced mixed results. For instance, Onwioduokit et al. (2014) found that fiscal deficit positively affects real economic growth in a one-year lag. Signifying that such a shortfall

was crucial in financing economic and social infrastructure. On the other hand, with the SVAR, Jallow discovered that taxes have a greater impact on output than government spending. For Carrasco et al. (2022), the Commitment to Equity (CEQ) methodology results indicated that The Gambia's fiscal system lowers inequality by 1.2 Gini points because every household pays into the system net, and the country's poverty headcount rises by 5.3 percentage.

Therefore, various fiscal policy measures in the Gambia, especially their contributions to sustainable economic growth, need to be investigated.

3. METHODOLOGY

3.1 Theoretical Framework

The research adopted the growth model of Solow (1956), which highlighted the importance of investment (i.e., capital) and labour. It suggests that poor countries, with low per capita incomes, should grow faster than rich countries and, over time, catch up in terms of per capita income. Countries with higher savings rates will experience higher steady-state levels of output. Additionally, the model implies a relationship between capital accumulation and growth, suggesting that increasing the capital stock will lead to growth. In this context, capital was classified into capital owned (i.e., gross fixed capital formation, government expenditures, and taxes) and capital borrowed (public debt).

3.2 Model specification

$$Y = F(K, AL)$$

Where Y is the output, K is capital, A is an index of technology or efficiency, and L is labour.

We specify the following econometric model to address the objective

$$RGDP = f(AGEXP, TAXR, PUBDT, GFCF, FPR) \dots \dots \dots 3.1$$

Where;

RGDP is the Real Gross Domestic Product used as a proxy to measure economic growth.

AGEXP Aggregate government expenditure

TAXR = Tax revenue

PUBDT = Public debt

GFCF = Gross fixed capital formation

FPR = Fiscal Policy Rate

Equation (1) can be expressed as:

$$RGDP = \alpha_0 + \alpha_1 AGEX + \alpha_2 TAXR + \alpha_3 PUBDT + \alpha_4 GFCF + \alpha_5 FPR + \mu_i \dots \dots \dots 3.2$$

The logarithm form of the model is as follows:

$$\begin{aligned} LnRGDP = \alpha_0 + \alpha_1 LnAGEX + \alpha_2 LnTAXR + \alpha_3 LnPUBDT + \alpha_4 LnGFCF + \alpha_5 LnFPR \\ + \mu_i \dots \dots \dots 3.3 \end{aligned}$$

Where: $\alpha_0, \alpha_1, \alpha_2, \alpha_3, \alpha_4$, and α_5 are parameters and μ , stochastic error term.

Theoretically, the expectations of the signs of the coefficients are as follows:

$$\alpha_0 > \alpha_1, \alpha_2 > \alpha, \alpha_3 > \alpha, \alpha_4, \text{ and } \alpha_5 < 0.$$

It is theoretically expected that government spending, if channeled into productive ventures, will promote growth, thus $\alpha_1 > 0$. Similarly, tax revenue, if productively invested, should promote economic growth and development, hence $\alpha_2 > 0$. The sign of public debt is indeterminate. It may be positive or negative, depending on its usage. If it is invested productively, it will lead to growth, but if it is expended on consumption, it will retard growth. Thus, $\alpha_3 > 0$ or < 0 . The domestic investment will promote economic growth, hence, $\alpha_4 > 0$, while the fiscal policy rate should retard growth (i.e. $\alpha_5 < 0$).

The Granger Causality test statistic was utilised to test the link between fiscal policy rate and economic growth.

The test involved the estimation of the following equations:

$$\sum AGEXP_t + \sum RGDP_t + \mu_t \dots\dots\dots 3.4$$

$$\sum RGDP_t + \sum AGEXP_t + \mu_t \dots\dots\dots 3.5$$

$$\sum TAXR_t + \sum AGEXP_t + \mu_t \dots\dots\dots 3.6$$

$$\sum RGDP_t + \sum TAXR_t + \mu_t \dots\dots\dots 3.7$$

$$\sum PUBDT_t + \sum RGDP_t + \mu_t \dots\dots\dots 3.8$$

$$\sum RGDP_t + \sum PUBDT_t + \mu_t \dots\dots\dots 3.9$$

$$\sum GFCF_t + \sum RGDP_t + \mu_t \dots\dots\dots 3.10$$

$$\sum RGDP_t + \sum GFCF_t + \mu_t \dots\dots\dots 3.11$$

$$\sum FPR_t + \sum RGDP_t + \mu_t \dots\dots\dots 3.12$$

$$\sum RGDP_t + \sum FPR_t + \mu_t \dots\dots\dots 3.13$$

The a priori expectations are as follows:

Unidirectional causality from RGDP to AGEXP is indicated if the estimated coefficients on RGDP in equation (i) are in equation (ii) is not statistically different from zero. However, unidirectional causality from AGEXP to RGDP exists if the set of RGDP coefficients in equation (1) is not statistically different from zero. Bidirectional causality is assumed when the set of RGDP and AGEXP coefficients is statistically different from zero in both regressions. These rules apply to all other sets of equations.

RESULTS AND DISCUSSION OF FINDINGS

Non-Stationarity Test

Table 1: Results of ADF Unit Root Test

Variable	Level			First Difference			Integration
	ADF	5% C.V.	Prob.	ADF	5% C.V.	Prob.	
RGDP	-2.48263	-3.52661	0.3345	-5.93758	-3.52976	0.0001	$I(1)$
AGEXP	-2.30583	-3.52661	0.4213	-6.24349	-3.52976	0.0000	$I(1)$
GFCF	0.968073	-3.52079	0.9998	-5.772	-3.52362	0.0001	$I(1)$
PUDBT	-1.98719	-3.52976	0.5899	-4.62268	-3.52976	0.0034	$I(1)$
TAXR	0.297443	-3.52079	0.998	-7.69788	-3.52362	0.0000	$I(1)$
FPR	-2.67175	-2.93694	0.0878	-6.84453	-2.94115	0.0000	$I(1)$

Source: Authors' computation (2023) using EViews 10 software package

Table 1 shows the results of the Unit root test of the non-stationarity of the variables RGDP, AGEXP, GFCF, TAXR, and FPR, which are made stationary at the difference and, therefore, integrated of order one. Given the integration levels of the variables, the ARDL Cointegration and Bound Test technique is applicable since ARDL is an OLS-based model that can be used for time series with varied orders of integration in addition to non-stationary time series.

Cointegration Analysis

Table 2: ARDL Bound Test

Sample: 1983 2022		
Included observations: 34		
Ho: No long-run relationships exist		
Test Stat.	Value	K
F-statistic	8.028918	5
Critical Value Bounds		
Significance	I0 Bound	I1 Bound
10%	2.26	3.35
5%	2.62	3.79
2.50%	2.96	4.18
1%	3.41	4.68

Source: Authors' compilation (2023) with EViews 10 software package

The result of the ARDL (1, 3, 3, 2, 1, 2) is presented in the Appendix. Lag length selections were made using the Akaike Information Criterion (AIC). The Bound Test Results in Table 2 determine whether the model's variables have a long-run equilibrium connection. The F-statistic value of 8.03 is higher than the upper values of the critical bounds $I(1)$ bound at 5% and 1%, respectively. This implies that there is an equilibrium relationship between variables. Next is to estimate the short-run and long-run forms of the model normalized to RGDP, which is the dependent variable for the results.

Table 3: Short-run cointegrated ARDL regression results

Selected Model: ARDL(1, 3, 3, 2, 1, 2)				
Cointegrating form				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FPR)	0.3652	0.1341	0.0	0.0000
D(FPR(-1))	0.3576	0.1642	0.0	0.0000
D(FPR(-2))	-0.2840	0.1224	0.0	0.0000
D(GFCF)	-0.0175	0.0047	-3.7114	0.0019
D(GFCF(-1))	0.0131	0.0045	2.8994	0.0105
D(GFCF(-2))	0.0112	0.0062	1.8107	0.0890
D(AGEXP)	0.8008	0.0381	21.0133	0.0000
D(AGEXP(-1))	-0.1432	0.0356	-4.0226	0.0010
D(PUDBT)	0.0591	0.1505	0.3925	0.6998
D(TAXR)	0.0575	0.0124	4.6466	0.0003
D(TAXR(-1))	0.0156	0.0107	1.4551	0.1650
CointEq(-1)	-1.1915	0.2106	-5.6584	0.0000

Source: Authors' computation (2023) using EViews 10 software package

Tables 3 and 4, respectively, represent the short-run and long-run ARDL regression results of the interactions between economic growth and indicators of fiscal policy in the Gambia. The outcomes disclosed a positive and statistically significant effect of FPR on economic growth in both short and long-run periods, in line with economic theoretical expectations. This signifies that FPR stimulates an increase in the performance of the economy. However, the lagged values of FPR produced mixed effects, suggesting that FPR has an adverse effect as the delay (lag) increases. Regarding the magnitude of the coefficients of FPR, the result indicates that in the short term, a rise in FPR will lead to an economic boost of 36.52 percent, *ceteris paribus*. Similarly, in the long run, an increase in FPR results in a 2.93 percent rise in economic growth. Like FPR, the effect of tax on economic growth is positive in both the short and long run. This is inconsistent with economic *a priori* expectations, which predict a negative relationship between taxation and economic growth. The magnitudes of tax in the short-run and long-run showed that a percentage rise in tax significantly increased economic growth by 5.75 percent and 4.95 percent, respectively, *ceteris paribus*.

Furthermore, a negative and statistically significant relationship was observed between gross fixed capital formation (GFCF) and economic growth in the short and long run, which contradicts the theoretical expectation. The magnitudes of the time frame parameters of GFCF indicated that a percentage rise in gross fixed capital formation caused a reduction in economic growth by 1.75 percent and 3.17 percent, respectively, *ceteris paribus*. However, as shown by the lagged values of GFCF, moving into the distant past, the adverse effect of gross fixed capital formation on economic growth fades away. On the other hand, a positive relationship was observed between public domestic debt (PUDBT) and economic growth in both the short- and long-run. In the short run, PUDBT insignificantly increased economic growth by 5.91 percent, but significantly increased economic growth by 23.68 percent in the long run. Similarly, government expenditure (AGEXP) positively and significantly impacted economic growth in both the short and long run. Thus, a percent rise in AGEXP increased economic growth by 80.08 percent and 94.12 percent in the short- and long-run, respectively, *ceteris paribus*.

The error correction mechanism coefficient confirms that the short-run model is well-behaved, given that it is statistically significant and correctly signed but non-fractional. Although this confirms the outcome of the ARDL bound tests, which indicated the presence of a long-run relationship amongst the variables, the size of the coefficient of the ECM (i.e., 1.1915) suggests

instability in the estimated ARDL model. The implications of such instability must be managed within a policy framework. As the model suggests, a rapid adjustment to long-run equilibrium implies that fiscal policies need to be responsive and possibly adaptive over time to maintain economic stability without imbalances. Given that the speed of the adjustment exceeds the ideal 100 percent or less empirically expected of the short-run periodic disequilibrium correction over the long run.

Table 4: Long-run cointegrated ARDL regression results

Long Run Coefficients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
FPR	0.0293	0.1344	2.1817	0.0444
GFCF	-0.0317	0.0065	-4.9108	0.0002
AGEXP	0.9412	0.0167	56.3792	0.0000
PUDBT	0.2368	0.0638	3.7107	0.0019
TAXR	0.0495	0.0143	3.4516	0.0033
C	-2.0989	0.6442	-3.2579	0.0049

Source: Authors' computation (2023) using EViews 10 software package

Table 5: Pairwise Causality Test Results

Null Hypothesis:	Obs	F-Stat.	Prob.
FPR does not Granger cause RGDP	36	1.3547	0.273
RGDP does not Granger cause FPR		0.2698	0.765
GFCF does not Granger-cause RGDP	39	1.1922	0.316
RGDP does not Granger cause GFCF		0.4576	0.637
AGEXP does not Granger cause RGDP	39	1.1032	0.343
RGDP does not Granger cause AGEXP		1.5422	0.229
PDBT does not Granger cause RGDP	39	2.4250	0.104
RGDP does not Granger cause PUDBT		0.2083	0.813
TAX does not Granger cause RGDP	39	1.1872	0.317
RGDP does not Granger cause TAXR		1.1098	0.341

Source: Authors' computation (2023) using EViews 10 software package

Table 5 presents the test of Granger causality. If one variable aids in forecasting another, it is said to have a Granger-cause relationship with the other variable. If there is no Granger causality despite a regression relationship, the variable cannot forecast the dependent variable; it can only affect or determine changes in the dependent variable. All the variables show a one-way causation on economic growth, but none has a bi-directional causality, as confirmed by the pairwise causality in Table 5. This implies that each fiscal policy variable can determine economic growth, but cannot be used to forecast it.

Table 6: Breusch-Godfrey Serial Correlation LM Test

F-statistic	1.065358	Prob. F(2,14)	0.3710
Obs*R-squared	4.491079	Prob. Chi-Square(2)	0.1059

Source: Authors' computation (2023) using EViews 10 software package

The p-values are greater than 0.05, indicating no evidence of serial correlation in the residuals. This suggests that the regression model does not suffer from autocorrelation issues, and the error terms do not exhibit patterns that would affect the efficiency of the estimation.

Table 7: Heteroscedasticity Diagnosis. Breusch-Pagan-Godfrey Test

F-statistic	1.175564	Prob. F(17,16)	0.3753
Obs*R-squared	18.88241	Prob. Chi-Square(17)	0.3353
Scaled explained SS	5.767879	Prob. Chi-Square(17)	0.9946

Source: Authors' computation (2023) using EViews 10.

Based on the Breusch-Pagan-Godfrey test, all the p-values are above 0.05, indicating no statistical evidence of heteroscedasticity in the regression model. This suggests that the variance of the residuals is constant, or that the assumption of constant error variance holds, and can rely on standard errors and inferences from the ARDL results.

Table 8: Stability Diagnosis. Ramsey RESET Test

Specification: RGDP RGDP(-1) FPR FPR(-1) FPR(-2) FPR(-3) GFCF GFCF(-1) GFCF(-2) GFCF(-3) AGEXP AGEXP(-1) AGEXP(-2) PUDBT PUDBT(-1) TAXR TAXR(-1) TAXR(-2)
C

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.577063	15	0.5725
F-statistic	0.333002	(1, 15)	0.5725

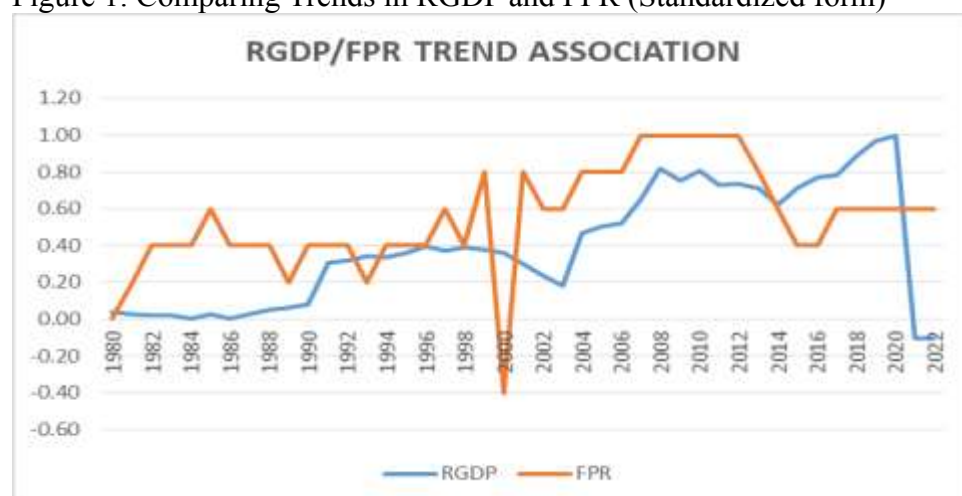
F-test summary:

	Sum of Sq.	df	Mean Squares
Test SSR	1.26E+14	1	1.26E+14
Restricted SSR	5.81E+15	16	3.63E+14
Unrestricted SSR	5.68E+15	15	3.79E+14

Source: Authors' computation (2023) using EViews 10

Given the high probability value of 0.5725, the model is stable in terms of functional form and shows no evidence of significant misspecification.

Figure 1: Comparing Trends in RGDP and FPR (Standardized form)



Source: Authors' computation (2023) with the EViews 10 software package

From Figure 1, a standardized comparison of the trend in RGDP and FPR is made. The data for the two variables are standardized to lie between 0 and 1, and the trends are compared. It is observed that between 1980 and 1990, while fiscal performance was below 0.5, RGDP also performed below an average of 0.5. From 1992, budgetary policy performance fluctuated slightly, reaching a peak of 0.8 in 1994. At this period, the response of RGDP was similar, with a constant around 0.4. The fiscal policy rate witnessed a sharp decline to -0.4 in 2000, after which it picked up again and rose to a stable rate of about 0.8 and continued increasing until 2012. RGDP, during these periods, responds positively to increased fiscal policy performance. Another sharp decline in budgetary policy performance was observed from 2014 to 2016. RGDP responded with a decrease during this period; the decline was observed between 2020 and 2022. This trend analysis suggests that whenever fiscal policy is performing well, economic growth always responds positively to it. The reverse is also true.

Discussion of Findings

The findings disclosed a significant relationship between fiscal policy rate and economic growth in the short and long run. It showed that an increase in the rate of budgetary policy will enhance economic growth. The outcome conforms with that of Gbadebo et al. (2015) in Nigeria, whose study found a favourable correlation between economic growth rate and gross national expenditure. This is in order with theoretical expectations, suggesting that fiscal interventions can successfully invigorate economic growth, particularly in times of economic decline or paucity, and in contrast with the findings of Daoudi (2023) in Algeria, who also found smaller and only in the short run but impacted negatively in the medium and long term.

Notably, the results related to taxation posit an adverse relationship between taxation and the growth of the economy, contrary to traditional economic theory. The observed positive effects of tax increases in both time frames indicate that higher taxes suppress growth by reducing investment and consumer spending. This finding is in tandem with that of Comlan (2017), indicating how taxation is limited to propelling growth in countries of the West African monetary union.

Gross fixed capital formation exhibits a negative relationship with economic growth, meaning that a percentage rise in GFCF will lead to reduced economic growth in both time frames. These adverse effects indicate inefficiencies in investment and that capital investments are not effectively contributing to productive capacity. This finding contrasts with that of Makhoba et al. (2019), who discovered that gross fixed capital formation positively impacts growth in South Africa.

However, public debt showed a positive relationship with economic growth. While its short-term impact was non-significant, its long-term significance suggests that moderate levels of public debt may facilitate economic expansion by financing productive investments. These posit that GDP growth can effectively support debt sustainability under favourable conditions. This result agrees with Khanal (2024), who analysed the effect of fiscal policy on economic growth in Nepal.

Similarly, government expenditure substantially impacted growth in both the short run and long run, signalling that efficient government spending can spur economic growth. These results underscore the importance of fiscal policy design, emphasising targeted spending as a priority for sustained economic growth. Finally, the error correction mechanism coefficient is robust. It indicates a well-specified short-run model, but its implications, in the long run, must be managed with maximum care inside the policy structure. In this case, fiscal policies must react quickly and positively to plausible adjustments over time to support stability.

5. CONCLUSION AND POLICY RECOMMENDATIONS

The study analysed how fiscal policy influences the economic growth of the Gambia using the ARDL and the Granger Causality Test. Our results suggest that fiscal policy rate will enhance economic growth, and the observed positive effects of tax increases in both time frames indicate that higher taxes suppress growth by reducing investment and consumer spending. The finding exhibits a substantial and adverse correlation between gross fixed capital formation and economic growth. Indicating a rise will lead to reduced economic growth in both time frames. In terms of public debt, its short-term impact was non-significant. Still, its significance in the long term suggests that moderate levels of public debt may aid economic prosperity by financing productive investments. Furthermore, government expenditure substantially impacted growth in both the short run and long run, and the causality test proved that the variables show a one-way causation on economic growth.

Stemming from these discoveries, the study put forward that the government should pay attention to policies that will intensify the efficiency of fiscal policy rates arrangement with growth objectives by linking fiscal policy rate adjustments explicitly to growth targets and undertaking impact assessments before implementing fiscal policy change. Tax policy designs and implementations should be reviewed to encompass tax incentives for transactions that invest in sustainable and innovative practices, and the accrued revenue should be reinvested into areas that will improve human capital and infrastructure development (technology and renewable energy). On public debt, there should be strategies for debt management on sustainable borrowing with transparency, and the focus should be on productive use for long-term development project that has economic growth potential in the future or tied investments that will generate high returns at a reasonable payback period to avoid debt overhang.

REFERENCES

- African Development Bank (2020). The Gambia: Country Diagnostic Note. Policy options to enhance socio-economic transformation and resilience. Available at: <https://www.afdb.org/en/documents/gambia-country-diagnostic-note-policy-options-enhance-socio-economic-transformation-and-resilience>
- African Economic Outlook (2024). Driving Africa's Transformation: The Reform of the Global Financial Architecture. <https://www.afdb.org/en/countries/west-africa/gambia/gambia-economic-outlook>
- Ajisafe, R. A., and Folorunso, B. A. (2002). The relative effectiveness of fiscal and monetary policy in macroeconomic management in Nigeria. *The African Economic and Business Review*, 3(1), 23-40.
- Anthony – Orji, O. I, Orji, A. Ogbuabor, J. E. Mba, P. N. and Onwe, I. E (2022). Financial Inclusion and Financial Stability in Nigeria: A New Empirical Evidence. *Journal of Xi'an Shiyong University, Natural Science Edition*, 17 (12), 138 – 160.
- Ayalogu, N. V., Kalu, I. E., and Robinson, M. O. (2023). The Impact of Fiscal Policy on Poverty Reduction in Nigeria (1980-2018). *World Scientific News*, 181(2023), 194 – 215.
- Comlan, C. A. (2017). Fiscal policy and economic growth in the West African Economic Monetary Union Countries. *Journal of Economics and Development Studies*, 5 (3), 96-104
- Carrasco, H., Jawara, H., and Meyer, M. (2022). The Effects of Fiscal Policy on Inequality and Poverty in The Gambia. Tulane University, Department of Economics, (No. 117).
- Daba-Ayana, I. (2022). Fiscal Policy and Economic Growth in Sub-Saharan African Countries: A Systematic Review. *Universal Journal of Finance and Economics*, 2(1), 42–51
- Daoudi, M. (2023). The impact of fiscal policy on economic growth in Algeria: Empirical study using SVAR model. *les cahiers du cread*, 39(2), 37-62.

- Gbadebo, A. D., and Mohammed, N. (2015). Monetary policy and inflation control in Nigeria. *Journal of Economics and Sustainable Development*, 6(8), 108-115.
- Jallow, M. S. (2023). The Impact of Macroeconomics Variables and Bank Internal Factors on Islamic Banking Performance During Covid-19 in Indonesia. *Journal of Islamic Economics and Philanthropy*, 6(1), 20-37.
- Kentikelenis, A. E., Stubbs, T. H., and King, L. P. (2016). IMF conditionality and development policy space, 1985–2014. *Review of International Political Economy*, 23(4), 543-582.
- Khanal, S. (2024). Effect of fiscal policy on economic growth in Nepal. *Pragyik Prabaha*, 12 (1), 69 – 80.
- Makhoba, B. P., and Kaseerem, I (2022), Fiscal policy and sovereign debt and economic growth in SADC economies: A panel Vector autoregressive analysis, *Cogent Economics and Finance* 10 (1), 2107149-210.
- Makhoba, B. P. and Kaseerem, I. (2019). Assessing the impact of fiscal policy on economic growth in South Africa. *African Journal of Business and Economic Research*, 14(1), 7 – 29.
- Muinelo-Gallo, L, and Roca-Sagales, O. (2011). Economic Growth and Inequality: The Role of Fiscal Policies. *Australian Economic Papers*, doi: 10.1111/j.1467-8454.2011.00412.x
- Onwioduokit, E. A., & Bassey, G. E. (2014). Fiscal deficit and economic growth in the Gambia: A search for threshold. *Developing Country Studies*, 4(19), 162-181.
- Orji, A. and Mba, P. N. (2010). Testing for simultaneity: The nexus between foreign private investment, capital formation and economic growth using Nigerian data. *Journal of Infrastructure Development*, 2(2), 105 – 120.
- Solow, R. (1956). A contribution to the theory of economic growth. *Quarterly Journal of Economics*, 70(1), 65–94
- Swan, T. W (1956). Economic growth and capital accumulation. *Economic record*, 32(2), 334 – 361
- Stoilova, D and Todorov, I. (2021). Fiscal policy and economic growth: Evidence from Central and Eastern Europe. *Journal of Tax Reform*, 7(2), 146–159.
- World Bank (2018). Enterprise Surveys. World Bank Group. Available at: <https://www.enterprisesurveys.org/en/data>
- World Bank. (2023). The World Bank Databank. Available at: <https://data.worldbank.org/wdi>
- World Bank Group (2023). The Gambia: Joint World Bank -IMF Debt Sustainability Analysis.