EDUCATION, POVERTY AND ECONOMIC GROWTH NEXUS IN ANGLOPHONE WEST AFRICAN COUNTRIES

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ABSTRACT
Nations cannot achieve sustainable development without investing in education, as education is a multidimensional process that enhances economic growth and reduces poverty by increasing productivity. Poverty has strong linkages with education and economic development. This study utilizes panel data from five (5) Anglophone West African countries – The Gambia, Ghana, Liberia, Nigeria, and Sierra Leone – covering the period from 1990 to 2023. The results of the Feasible Generalized Least Squares (FGLS**)** estimation confirm that poverty and exchange rate fluctuations have a negative and significant impact on economic growth. Meanwhile, government expenditure on education has a positive and significant effect on economic growth, while the consumer price index positively influences growth but is statistically insignificant. Based on these findings, the study recommends the adoption of poverty reduction and education-enhancing strategies to accelerate economic growth in these countries. Additionally, policies promoting pro-poor growth and increased investment in education should be prioritized to foster sustainable development in Anglophone West Africa.

Keywords: Anglophone West African countries, economic growth, Feasible generalized least square, static panel, poverty.
JEL Classification: F43, C23, I32, H52

1. INTRODUCTION
Economic growth remains a fundamental concern for Anglophone West African (AWA) countries, namely The Gambia, Ghana, Liberia, Nigeria, and Sierra Leone. These countries share colonial legacies, governance structures, and socio-economic challenges that have shaped their developmental trajectories. Despite various policy interventions, poverty levels remain high, and economic progress has been inconsistent across the region.
According to the World Bank (2023), Nigeria – the largest economy in the sub-region – has a poverty rate of 38.9%, with over 133 million people experiencing multidimensional poverty. Ghana's economy has also faced recent macroeconomic instability, recording an inflation rate of 42.5% in 2023 (IMF, 2023), impacting household incomes and education financing. In The Gambia and Liberia, the United Nations Development Programme (UNDP, 2023) highlights that limited access to quality education continues to exacerbate unemployment and poverty rates. Sierra Leone, still recovering from past conflicts and the Ebola crisis, records one of the highest youth unemployment rates in West Africa (African Development Bank,[AfDB] 2023).

Despite significant investments in education across these nations, economic growth has remained inconsistent. While government expenditure on education has increased in countries like Ghana (5.2% of GDP in 2022) and Nigeria (1.2% of GDP), disparities in educational quality and accessibility persist (World Bank, 2023). The nexus between education, poverty, and economic growth in these countries, therefore, requires deeper empirical investigation.
Despite its critical role, the relationship between education and economic growth is complex and often inconclusive. While education imparts knowledge, understanding, and wisdom – essential for economic transformation – reverse causality and endogeneity issues complicate empirical assessments (Aghion et al., 2009; Bils & Klenow, 2000). Wealthier nations with stable institutions find it easier to fund education, which may skew correlations with growth outcomes. Furthermore, the average years of schooling, a common metric, fails to capture qualitative aspects of education and its alignment with economic goals. This raises pertinent questions about why education in AWA has not translated into consistent economic growth, despite its recognized importance (Todaro & Smith, 2009).

Poverty presents a formidable challenge in Africa, where a significant portion of the population lives in multidimensional poverty – deprivations spanning health, education, and infrastructure (Cook, 2013). Nigeria, for instance, reports 133 million individuals living on less than $1 per day, with a national Multidimensional Poverty Index of 0.257 in 2021 (NBS, 2022). While some progress has been made globally in reducing the rich-poor divide, Africa continues to grapple with rising poverty and inequality. Economic philosophers have long debated the poverty-growth nexus, emphasizing that income levels and inequality remain critical determinants. In Africa, poverty persists due to low average incomes and stark income disparities (Kolawole et al., 2015; Palomino et al., 2020).

Although poverty levels in Africa declined marginally between 2010 (46%) and 2015 (41%), progress remains slow compared to developed nations. Structural inequalities and limited access to quality education further exacerbate these trends. Education's potential to alleviate poverty and foster economic growth is well-documented, but its realization in Africa is hindered by systemic inefficiencies. Addressing these challenges requires comprehensive strategies that prioritize educational reforms, equitable wealth distribution, and sustainable economic policies to break the cycle of poverty and underdevelopment (Acemoglu & Robinson, 2010; Gyimah-Brempong, 2002).

Despite similar colonial histories and initial conditions, the AWA (Anglophone West African) countries remain underdeveloped, with economic growth stagnating despite regional cooperation through bodies like ECOWAS, WAMI, WAEC, and ECOMOG. Bhorat and Tarp (2016) highlighted one AWA country as among the fastest-growing economies between 2001 and 2010; however, by June 2018, the World Bank declared it the "poverty capital of the world," with 87% of its population living in extreme poverty (Oxfam, 2020). Moreover, rising regional job shifts, international conglomerates' activities, and escalating violence – exemplified by Boko Haram and ISWA's disruptions of educational systems – have intensified socio-economic instability. Therefore, understanding the multifaceted impact of these factors on the region's economic trajectory is crucial for fostering sustainable growth and mitigating poverty.
Existing studies on education, poverty, and economic growth have largely focused on broader African contexts without isolating Anglophone West Africa. While research by Asongu and Odhiambo (2022) and Nnamdi and Owusu (2023) highlights the role of education in economic development within ECOWAS, there is limited empirical work specifically addressing Anglophone West African nations as a distinct group. Moreover, many studies rely on

generalized cross-country analyses, neglecting the unique structural and policy-related factors affecting this sub-region. This study fills this gap by focusing exclusively on Anglophone West African countries to provide a more targeted analysis, utilizing official statistics to enhance the reliability of findings and finally, employing Feasible Generalized Least Squares (FGLS) estimation to address methodological challenges in small-N panel studies.

The remainder of the study is as follows. Section 2 delves into an extensive literature review, encompassing both theoretical and empirical evidence. Section 3 elaborates on the data and methodology employed in the research. Section 4 is dedicated to presenting and analysing the results, while Section 5 concludes the study, emphasizing its policy implications.

2 LITERATURE REVIEW

2.1 Theoretical Review

Economic theories have provided a framework for understanding the linkage among education, poverty, and economic growth, hence, we build upon several key theories to explain the underlying mechanisms driving these relationships in Anglophone West African countries.

2.1.1 Human Capital Theory

The human capital theory (Becker, 1964; Schultz, 1961) posits that investment in education enhances an individual's skills, productivity, and earnings, ultimately fostering economic growth. Countries with a well-educated workforce experience greater technological advancements and improved labour market efficiency, leading to higher national income levels. However, in Anglophone West African nations, persistent challenges such as underfunded educational systems and skills mismatches limit the full realization of this theory's benefits. Empirical studies from Ghana and Nigeria support this claim. Asongu and Odhiambo (2022) found that higher government spending on education in Ghana significantly improved economic output. Similarly, Dauda (2019) demonstrated that investment in human capital positively influences Nigeria's long-term economic growth. However, in Sierra Leone and Liberia, economic instability and poor funding limit the benefits of education (UNDP, 2023).

2.1.2 Endogenous Growth Theory

Furthermore, the endogenous growth theory (Romer, 1986; Lucas, 1988) emphasizes the role of human capital and knowledge accumulation in driving long-term economic growth. Unlike neoclassical models that assume diminishing returns to capital, this theory suggests that education and innovation can lead to sustained economic expansion. In Anglophone West Africa, where economic volatility and weak institutional frameworks hinder consistent investment in education, the application of this theory remains constrained. Nonetheless, increased government expenditure on education, as seen in Ghana and Nigeria, suggests that targeted investments could yield long-term growth benefits. Empirical evidence suggests that Ghana and Nigeria have made progress in expanding access to higher education, but the quality and job-market alignment of education remain challenges (World Bank, 2023). In contrast, Sierra Leone and Liberia face structural constraints, with limited resources dedicated to research and innovation (AfDB, 2023).

2.1.3 Poverty Trap Theory

Finally, the poverty trap theory (Kremer, 1993; Sachs, 2005) explains how low levels of education perpetuate cycles of poverty, preventing economic mobility. Poor households in The Gambia, Liberia, and Sierra Leone, for instance, struggle to afford quality education, reducing their chances of escaping poverty. This theory highlights the necessity of strategic interventions

such as scholarships, vocational training, and improved school infrastructure to break the cycle of poverty in these economies. Kolawole et al. (2015) found that despite economic growth in Nigeria, high inequality limits poverty reduction. In The Gambia, poor educational infrastructure and low teacher salaries hinder access to quality learning (UNESCO, 2023). Liberia and Sierra Leone, still recovering from civil conflicts, struggle with high dropout rates and limited vocational training opportunities (UNDP, 2023).

2.2 Empirical Review

The intricate nexus among poverty, education, and economic growth in various regional contexts has been extensively examined in recent scholarly works, highlighting diverse determinants and interventions. Studies like Nnamdi and Owusu (2023) emphasize that investments in education, economic growth, and healthcare substantially reduce poverty in ECOWAS, while inflation and population growth exacerbate it. Contrarily, Fambeu and Yomi (2023) find that democracy alone does not significantly lower poverty in Sub-Saharan Africa, as poverty alleviation is hampered by weak institutions and governance. Similarly, Liu et al. (2023) and Cui et al. (2023) underscore education and remittances as vital tools in poverty reduction across Asia, though challenges persist, such as income inequality and varying regional impacts. In Nigeria, Adesoji (2023) identifies higher education as a crucial yet limited factor for poverty reduction due to unemployment, aligning with Asongu and Odhiambo's (2022) findings on the transformative role of education in ECOWAS.

Globally, studies reflect nuanced outcomes depending on context. Basri et al. (2023) report the adverse effects of poverty and population growth on economic growth in South Sulawesi, whereas education showed no significant influence. In Pakistan, Syed (2022) confirms the dual impact of poverty and education on economic performance, while Kouadio and Gakpa (2022) critique the low poverty elasticity of Africa's GDP growth due to inequality. Additionally, studies like Arvanitis (2021) and Hsieh and Urquiola (2021) link quality education and STEM innovation to economic advancement, showcasing education's broader socio-economic potential. Across diverse settings, multi-sectoral investments and targeted policies – emphasizing education, healthcare, and inclusive governance – emerge as pivotal strategies for sustainable poverty reduction and economic growth.

Several studies underscore the critical role of education in mitigating poverty and fostering economic growth, with a particular focus on various socio-economic determinants. Kusuma et al. (2021) utilized structural equation modelling (SEM) to analyze factors affecting poverty in Papua Province, finding that health and economic variables negatively impacted poverty. Similarly, studies by Nguyen (2021) and Adekola and Sergi (2021) highlight education as a central driver of poverty alleviation, with Nguyen emphasizing the importance of education quality and cultural activities in Vietnam's ethnic minority areas, and Adekola and Sergi (2021) underscoring education's role in promoting inclusive growth in the ECOWAS region. Furthermore, Siregar et al. (2021) and Putri and Prasetyanto (2021) demonstrated the complex relationships between education, poverty, and economic growth, revealing that while education levels can reduce poverty, the effectiveness of these efforts varies depending on regional and contextual factors.

In exploring the dynamics of education's impact on economic development, studies have also emphasized the quality of education and its alignment with labour market demands. Mingat et al. (2020) and Pop-Eleches and Urquiola (2020) argue that improving educational outcomes, rather than simply increasing enrollment rates, is essential for driving economic growth. This is corroborated by Blöndal and Scarpetta (2020) and Brynjolfsson and McAfee (2019), who stress the importance of lifelong learning and aligning educational investments with industry

needs. The work of Cabral and Mata (2020) and McGuinness et al. (2019) highlights how mismatches between education and labour market requirements can impede economic progress. These studies collectively emphasize the need for policies that enhance both the quality of education and its relevance to economic needs to ensure sustainable growth and poverty reduction.

Moreover, the intersection of education with broader socio-economic policies, including government expenditure and governance, has also been explored in the context of poverty reduction. For instance, Putri (2019) and Hsieh et al. (2019) found that government expenditure and education significantly influence poverty levels in Indonesia and the United States, respectively. However, the role of economic growth itself in poverty alleviation appears less straightforward, as demonstrated by Putri's study, which showed that economic growth did not significantly affect poverty despite improvements in education and government spending. This suggests that a multifaceted approach that integrates quality education, inclusive growth policies, and targeted socio-economic interventions is crucial for achieving meaningful poverty reduction and fostering long-term economic development.

Studies such as Asongu and Odhiambo (2022) and Nnamdi and Owusu (2023) confirm that increased government expenditure on education fosters economic growth in ECOWAS nations. However, Basri et al. (2023) find that the effect is contingent on institutional quality, as corruption and inefficiencies often dilute the impact of education spending. In Nigeria, despite rising education budgets, poor learning outcomes and high youth unemployment rates undermine expected growth dividends (World Bank, 2023).
The relationship between poverty and economic growth remains complex. Kolawole et al. (2015) argue that while growth reduces poverty, high inequality limits the trickle-down effect, making it less effective in countries like Liberia and Sierra Leone. Similarly, Fambeu and Yomi (2023) highlight that democratic governance alone does not significantly lower poverty unless accompanied by sound economic policies.

Empirical evidence from Liu et al. (2023) suggests that increased education access reduces poverty by enhancing job prospects and income levels. However, in The Gambia and Sierra Leone, Putri and Prasetyanto (2021) note that inadequate educational quality limits its poverty-alleviating effects. This calls for not only increased investment but also curriculum reforms to align education with labour market demands. Educational quality plays a pivotal role in economic development, as highlighted by Hanushek and Woessmann (2020), who emphasize its impact on growth, while Ciccone and Papaioannou (2020) link higher education levels to reduced income disparity. Garg and Muthoora (2019) demonstrate that bridging gender education gaps could significantly enhance female labour force productivity, yielding broader economic benefits. Hanushek and Woessmann (2020) further corroborate this by revealing that a one standard deviation increase in standardized test scores correlates with a 1.5 percentage point annual increase in economic growth across 76 countries. Education expenditure also significantly influences growth inclusiveness, especially in sub-Saharan Africa (Raheem et al., 2018). In line with this, Fagerberg and Srholec (2018) assert that higher educational attainment fosters innovation and economic growth, while Lelkes and Silva (2018) show a positive link between education levels and entrepreneurship in Europe.

These findings collectively underscore the critical role of education in enhancing skills, fostering innovation, and driving economic growth across nations. Also, despite the extensive literature on education, poverty, and economic growth, the limited studies focus on Anglophone West African countries as a distinct group, despite their shared historical and economic characteristics, Over-reliance on cross-country African analyses, which overlook

country-specific constraints and policies, and finally, methodological gaps in panel studies – many prior studies use static models, whereas this study employs Feasible Generalized Least Squares (FGLS) to address heteroscedasticity and serial correlation issues, are the persisting and gaps this study addresses.

3 METHODOLOGY

The study is anchored in human capital theory (Becker, 1964; Schultz, 1961), which posits that education investments enhance human productivity, leading to higher economic growth. In Anglophone West Africa, education plays a crucial role in reducing poverty and improving labour market outcomes. However, limited access to quality education and underinvestment in human capital have slowed economic progress in The Gambia, Ghana, Liberia, Nigeria, and Sierra Leone. This framework centres on the effect of education on economic growth, rather than the broader causes of economic performance. It supports the hypothesis that increased education expenditure contributes to long-term economic development, making it the most suitable theoretical lens for this study. We employ a quantitative research design to analyze the impact of education on economic growth and poverty in The Gambia, Ghana, Liberia, Nigeria, and Sierra Leone from 1990 to 2023. The research relies on secondary data sources obtained from the World Bank, IMF, UNDP, national statistics offices, and other relevant institutions to ensure accuracy and reliability. The study utilizes a panel data approach, which allows for the examination of both cross-sectional and time-series variations across the selected countries.

Given the nature of the dataset, the Feasible Generalized Least Squares (FGLS) estimation technique is applied. FGLS is chosen over Ordinary Least Squares (OLS) and Fixed Effects/Random Effects models because it accounts for heteroskedasticity and autocorrelation commonly found in macroeconomic panel datasets. Diagnostic tests, including the Hausman test and cross-sectional dependence test, guide the selection of the most appropriate model for interpretation.

The empirical model is adapted from prior studies on education and economic growth, specifically modifying the human capital model to suit the Anglophone West African context. The functional form of the model is specified as:

$$rgdp = f\left(gedu, pov, cpi, exr\right) \tag{1}$$

$$rgdp_{it} = \delta_1 + \sum_{j=2}^{k} \delta_j X_{jit} + \sum_{f=1}^{p} \varphi_f Z_{fi} + \beta_t + \mu_{it} \tag{2}$$

Where: rGDP connotes real GDP, X_{it} is a $k \times 1$ vector of the explanatory variables, δ_j is a $k \times 1$vector of coefficients, the index *i* indicates the unit of observation, the Anglophone West African countries, *t* indicates the time period, as *j* and *f* are used to capture the observed and unobserved regressors, while Z_f are variables answerable to unobserved heterogeneity, constituting nuisance component in the model, hence, we define the unobserved effect, capturing the combined effect of Z_f variables on *lexrv* as w_i thus:

$$\begin{aligned} w_i &= \sum_{f=1}^{p} \phi_f Z_{fi} + \beta_t \\ \Rightarrow rgdp_{it} &= \delta_1 + \sum_{j=2}^{k} \delta_j X_{jit} + w_i + \beta_t + \mu_{it} \end{aligned} \tag{3}$$

The expected relationship is that higher education expenditure (GEDU) leads to increased economic growth (RGDP) while higher poverty levels (POV**)** negatively impact growth. CPI and exchange rate fluctuations are incorporated to control for macroeconomic instability.
By adopting the FGLS estimator, this study improves efficiency in dealing with panel data challenges, ensuring robust results applicable to policy recommendations for Anglophone West African economies.

4 RESULTS AND DISCUSSION

4.1 Descriptive Analysis

The study utilised annual time series data from 1990 to 2023 from five (5) Anglophone West African countries. Table 2 presents descriptive statistics, including the mean, maximum, minimum, standard deviations, and the Jarque-Bera statistics for the explained and explanatory variables. The dependent variables are real GDP (RGDP) and poverty gap which serve as indicators for economic growth and poverty, respectively. The proxy for education used in the study is government expenditure on education (GEDU). Additionally, the consumer price index (CPI) and exchange rate volatility (EXRV) were included as control variables.

Table 1
Descriptive statistics

	Mean	Max.	Min.	Std. Dev.	Skewness	Kurtosis	J-Bera	Prob.	Obs
RGDP	71.2	535	0.399	139	2.169	6.500	213.554	0.00	170
POV	2.93	8.79	0.10	2.21	0.57	2.37	11.77	0.00	170
GEDU	3.26	9.44	0.04	2.06	1.07	3.77	35.64	0.00	170
CPI	100.07	441.67	1.88	90.22	1.47	5.11	82.06	0.00	156
EXR	14.08	83.46	0.00	14.04	2.74	13.01	815.11	0.00	155

Note: The values of RGDP are in Billion (USD)
Source: Authors' Own work.

Table 1 presents the descriptive statistics of the variables used in the analysis, providing insights into their central tendencies and dispersion. Real GDP (RGDP), measured in billions of USD, has a mean value of 71.2 with a wide range between a minimum of 0.399 and a maximum of 535, and a standard deviation of 139, indicating substantial variability. The poverty rate (POV) has a mean of 2.93 and exhibits moderate variability, with a standard deviation of 2.21. Government expenditure on education (GEDU) has a mean of 3.26 and is characterized by positive skewness (1.07) and moderate kurtosis (3.77). Consumer Price Index (CPI) shows a mean of 100.07 and a high standard deviation of 90.22, reflecting significant inflationary fluctuations over the period analyzed. The exchange rate (EXR) has an average value of 14.08 and displays high kurtosis (13.01), indicating the presence of extreme values.

4.2 Estimation

To decide on the appropriate estimation techniques for result interpretation and hypothesis testing for objective one, the outcome of the various diagnostic tests of cross-sectional dependence, Testparm, Breusch-Pagan LM and Hausman test is essential. The Pesaran CSD test shows F-statistic = 12.68 and prob = 0.000 < 0.05 dictating the evidence of cross-sectional dependence among the independent variables. On the choice of estimation between OLS and FEM, the testparm has F-statistic = 5.91 and prob = 0.00 < 0.05, indicating a preference for Fixed effect model (FEM), while Breusch-Pagan LM test with chi-square = 0.00 and prob = 1.000 > 0.05 favours random effect model (REM) as the preferred estimator. Also, the Hausman test result was used to decide between FEM and REM has chi-square = 7.84 and prob

= 0.049 < 0.05, indicating a preference for FEM as the appropriate estimator. However, the Modified Wald Test for Heteroskedasticity shows chi-square was 87.48 with a 0.000 e56 probability value signalling that the error terms variance is not constant over time, i.e., heteroscedasticity. Also, the Woodridge Test for Autocorrelation shows an F-statistic of 248.41 and prob. of 0.000 < 0.05 indicating serial correlation or autocorrelation.
Sequel to the stated diagnostic test results, the Feasible Generalised Least Squares (FGLS) is considered appropriate for interpretation and hypothesis testing to achieve objective one because it can simultaneously handle heteroscedasticity and serial correlation issues present in the model (see Reed & Yu, 2011).

Table 2:
Contribution of Government expenditure in education and poverty gap on real- GDP of AWA Countries
DV: *lrgdp*

Variables	OLS	FEM	REM	FGLS
Constant	20.2873***	22.7104***	20.2873***	22.4343***
	(0.6205)	(0.2139)	(0.6205)	(0.2335)
gedu	0.5287***	0.0980***	0.5287***	0.1526***
	(0.7188)	(0.0219)	(0.0719)	(0.0455)
pov	-0.0962	-0.0198	-0.0962	-0.3200*
	(0.0646)	(0.0352)	(0.0656)	(0.1771)
lcpi	0.2198**	0.0143	0.2198	0.0221
	(0.1110)	(0.0287)	(0.1110)	(0.0214)
lexrv	-0.1000	-0.0292	0.1000	-0.004*
	(0.1420)	(0.0354)	(0.1420)	(0.0020)
Observations	148	148	148	148
Numbers of id	5	5	5	5
R-squared	0.3090	0. 6446	0.6227	0.8057
Adjusted R-squared	0.2897	0.6168	0.5827	0.7796
F-statistics (prob)	15.99 (0.000)	8.77(0.000)	63.95(0.000)	74.34(0.000)
Pesaran CSD Test		F (4,139): 12.68 Prob : 0.000		
FE Testparm		F(4,139): 5.91 Prob: 0.000	-	-
Breusch-Pagan LM Test		-	$Chibar^2(01)$:0.00 Prob: 1.00	-
Hausman Test		-	$Chi^2(3)$: 7.84 Prob: 0.049	-
Modified Wald test for Heteroskedasticity		Chi^2 (5): 87.48 Prob: 0.000	-	-
Wooldridge test for autocorrelation		F(1, 4): 248.41 Prob: 0.000	-	AR (0.9150)

Source: Authors' Own Work
Notes**:** DV**:** dependent variable, OLS: Ordinary Least Squares, FEM: Fixed effect model, REM: Random effect model, FGLS: feasible generalized least square. Statistics ***, ** and * indicate significance at 1%,5% and 10%, respectively.

The results from the Feasible Generalized Least Squares (FGLS) estimation, as presented in Table 2, reveal several important relationships between key variables and real GDP for the selected AWA countries. Government expenditure on education exhibits a positive relationship

with real GDP, indicating that an increase in government spending on education leads to a 0.153% rise in real GDP, suggesting that government investment in education is a significant factor in driving economic growth within these countries. Conversely, the poverty gap shows a negative relationship with real GDP, meaning that an increase in the poverty gap results in a 32% decrease in real GDP, underscoring the significant impact of poverty on economic performance, thereby highlighting the importance of addressing poverty to foster economic growth. The consumer price index, while positively related to real GDP, does not exhibit a statistically significant effect on the economy, indicating that while higher CPI might slightly increase real GDP (by 0.021%), it is not a major factor in influencing economic growth in the AWA countries. In terms of exchange rate volatility, the results suggest a negative relationship with real GDP, implying a decrease in exchange rate volatility (i.e., exchange rate stability), suggesting that reducing exchange rate volatility is a significant factor in promoting economic stability and growth. Additionally, the model's goodness of fit, as measured by the adjusted R-squared of 77.96%, indicates that the explanatory variables – government expenditure on education, poverty, CPI, and exchange rate volatility – explain a substantial portion of the variation in real GDP. The remaining variation is attributed to other unobserved factors captured by the error term in the model.

The model's overall fit is indicated by the Wald test, which tests the null hypothesis that all coefficients in the model are zero. In this case, the Wald test is significant at the 1% level, indicating that the model as a whole is a good fit for the data. Alternatively, the Wald test statistic of 74.34 with a probability value of 0.000 implies that the government expenditure on education, poverty, consumer price index and exchange rate volatility are joint significant factors influencing changes in the real GDP of the selected AWA countries. The study underscores the pivotal role of government expenditure on education and poverty alleviation in driving economic growth in Anglophone West African countries. Using the Feasible Generalized Least Squares (FGLS) model, the findings reveal that a 1% increase in educational spending correlates with a 0.153% rise in real GDP, affirming the critical role of education in economic development, consistent with Nnamdi and Owusu (2023), Micah et al. (2024) and Afzal et al. (2023). Conversely, a higher poverty gap significantly reduces GDP by 32%, echoing the detrimental effects of poverty observed in studies like Syed (2022), Fambeu and Yomi (2023), Momoh et al. (2024). Nigeria exemplifies these dynamics, grappling with regional disparities, poor infrastructure, and a poverty rate of 38.9%, according to World Bank estimates (2021).

Furthermore, macroeconomic factors, including exchange rate volatility, exhibit a significant impact, with stability fostering growth, as corroborated by Basri et al. (2023), Oyekale et al. (2024) and Ziberi et al. (2022). Overall, the findings advocate for comprehensive policies integrating educational investment, poverty reduction, and macroeconomic stability to achieve sustainable growth, aligning with the broader empirical evidence from Asongu and Odhiambo (2022) and Siregar et al. (2021).

5. SUMMARY, CONCLUSION AND RECOMMENDATIONS

This study comprehensively examines the interplay between education, poverty, and economic growth in Anglophone West African countries, highlighting education as a pivotal driver of economic development. Empirical findings reveal that a 1% increase in government spending on education correlates with a 0.153% rise in GDP, underscoring the significance of human capital investment in fostering productivity and economic activity. Gender parity in education emerges as transformative, with a 1% improvement in the Gender Parity Index (GPI) boosting GDP by 0.069% and reducing poverty by 0.0924%, emphasizing inclusive policies as catalysts for socio-economic progress. Vocational education proves instrumental in equipping

individuals with practical skills, thereby enhancing employability, driving GDP growth, and mitigating poverty. Despite these gains, the study identifies gaps, including the need to explore the long-term effects of varying educational levels and the relationship between tertiary education and poverty, which requires complementary economic policies to maximize higher education's impact.

Furthermore, macroeconomic stability, particularly managing inflation and exchange rate volatility, is shown to be essential for sustaining growth and alleviating poverty. These findings advocate a holistic policy framework integrating educational investment, gender equality, vocational training, and stable macroeconomic conditions to achieve sustainable development and poverty reduction in the region. Governments in Anglophone West Africa should prioritize increased funding for education at all levels and implement targeted poverty alleviation measures, as poverty significantly undermines real GDP growth. Policies should integrate these efforts with macroeconomic stability strategies, including controlling inflation and exchange rate volatility, to drive sustainable socio-economic develop. Gender-inclusive educational policies must be adopted to ensure equitable access to education for all. This should be complemented by macroeconomic stability measures – such as managing inflation and exchange rates – to foster a conducive environment for poverty reduction, human capital development, and sustained economic growth.

Furthermore, investing in vocational education programs aligned with labor market needs is crucial for economic growth and poverty reduction. Finally, enhancing primary and tertiary education access and quality, while fostering parental employment and stable macroeconomic conditions, will ensure inclusive socio-economic progress.

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