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PUBLIC DEBT AND GROWTH IN SELECTED WEST AFRICAN COUNTRIES: IMPLICATIONS FOR ECONOMIC INTEGRATION¹

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ABSTRACT

Based on an eclectic approach, we examined the public debt – growth nexus in selected SSA countries. Panel regression results indicate that debt/GDP and rates of inflation had negative relationship with the growth in real GDP and its per capita measure for SSA. For the ECOWAS countries, debt/GDP was positively related to growth in real GDP and its per capita measure while rate of inflation had a negative relationship. The global economic crisis had no impact on the debt-growth link in the ECOWAS countries. For economic integration and eventual monetary union to be sustainable, countries in ECOWAS must ensure fiscal prudence in the management of their economies.

Keywords: Public debt, economic integration, debt sustainability, West Africa
JEL Classification: F34; H6; F15

INTRODUCTION

Economies of Sub-Saharan Africa (SSA) have depended over time on external assistance for economic transformation and sustained development; part of the external assistance consists of public debt (government debt). Public debt in SSA has risen remarkably over the years. From less than US\$50 billion in 1970, it rose to US\$250 billion in 1999 and declined to about US\$180 billion in 2005 due to debt repayments, forgiveness and new types of lending. Several studies have shown that external debt (public and private) has negative impact on economic growth in SSA (Iyoha, 1999; Ajayi, 1997). A recent study argues that enhanced debt profile induces

¹ Views expressed in this study are solely mine and do not represent those of WAIFEM or its Board of Governors. I wish to acknowledge the useful comments from the reviewer; the comments have enriched the study. However, the usual disclaimer.

capital flight in SSA (Ndikumana and Boyce, 2011). In the West African subregion, countries have relied on public debt to meet government commitments. Apart from the global economic crisis which necessitated governments borrowing for fiscal stimuli, countries such as Sierra Leone and Liberia had to rely on public debt to finance construction efforts after the war.

Expectedly, most of the countries are no longer heavily indebted because of debt forgiveness, etc, the debt profile continues to rise. It is, therefore, important to determine the precise relationship between public debt, growth and significant economic variables such as inflation. These countries do not have viable capital markets hence public debt rather than private debt remains the source for financing development. The composition of SSA's external debt reveals interesting results. In 2008, almost half the total debt was long-term to official creditors, 22 per cent was held by bilateral creditors, 15 per cent by the World Bank; one per cent by the IMF; and nine per cent by other official multilateral creditors. According to Ndikumana and Boyce (2011): "As African's external debt grew, so did its outflow of debt service: interest payments and principal repayment – from less than US\$1 billion per year in the early 1970s, debt service payments from the 33 SSA countries have risen to more than US\$10 billion per year since 1994, with a peak outflow of US\$20 billion in 2006". This has implications for any government's budget constraint as more revenue is required not just to pay the debts but to service them.

For ECOWAS, total public external debt stood at US\$69,518 million (current prices) in 2001; this increased to US\$91,388 million in 2004 and thereafter showed a steady decline due to the debt relief programmes. Hence, by 2009, total ECOWAS public external debt was US\$49,953.0 million. In 2001, Nigeria, Cote d'Ivoire, Ghana and Senegal top the list of debtors. Of the total ECOWAS debt in 2009, Nigeria's share was almost 40 per cent. While the public external debt of the CFA zone showed increases for most of 2001 to 2009, that of the West African Monetary Zone (WAMZ) indicated mixed results; with public external debt of US\$30,559.0 million in 2005, it dropped

significantly to US\$10,050.0 million in 2007 because of the debt forgiveness given to Nigeria by the Paris group of creditors. Notably, what is clear is that ECOWAS countries still have large external debt.

Consequently, the objective of this study is to analyse the relationship between debt particularly public debt and related indices to growth and policy variables such as inflation. The study is organised as follows. In section 2, we discuss related literature, framework of analysis and methodology. Section 3 provides some stylised facts on the subject matter while the empirical results and its implications for economic integration in the subregion follow in section 4. We conclude the study in section 5. The expectation is that the study would give additional insights on the debt – growth nexus in the West African subregion especially during the global economic crisis.

RELATED LITERATURE, THEORETICAL FRAMEWORK AND METHODOLOGY

There are studies relating public debt to growth (Barro, 1979; Reinhart and Rogoff, 2010). For debt sustainability, governments have to generate more revenue through domestic resource mobilisation such as increased taxation. There is no doubt that unanticipated high inflation can reduce the real cost of servicing the public debt, particularly long-term debt. Debt plays a vital role in the budget constraint of government's efforts to ensure fiscal sustainability. Iyoha (1999) is excellent on external debt and economic growth in SSA countries; the econometric results suggest that external debts had no positive impact on economic growth in SSA.

A more recent study (Reinhart and Rogoff, 2010) examines economic growth and inflation at different levels of government and external debt. For developed countries, it finds a weak relationship between government debt and real GDP growth ratio below a threshold of 90 per cent of GDP; in addition, emerging

markets face lower thresholds per external debt. The study focuses more on advanced and emerging economies. Therefore, many countries in the West African subregion (except Ghana and Nigeria) are omitted from the study.

Another approach in examining the subject matter rests on the public finance scenario, central to sustainability of regional integration and eventual monetary union. Fiscal sustainability stresses the ability of the government to generate enough primary budget surplus to stabilise its debt ratio. Debt sustainability is a necessary condition for macroeconomic stability and sustained economic growth. "A fiscal deficit that is financed through external borrowing will increase the external debt burden and directly reduce external sustainability. The accumulation of large debts naturally generates a debt overhang that can create a permanent climate of financial fragility for member countries. For countries in a monetary union, this is crucial, as debt – servicing obligations tend to crowd out resources for social services and therefore exacerbate poverty situations" (Oshikoya *et al*, 2010: 85). It is, therefore, crucial that debt indicators of ECOWAS countries be properly managed for sustainability. The present Euro-crisis further re-echoes the significance of fiscal/debt sustainability among member countries in a monetary union.

A review of related literature on debt sustainability particularly for advanced economies in Oshikoya (2010), uses an eclectic approach in evaluating debt sustainability in the West African Monetary Zone (WAMZ), comprising The Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone. Our study covers more countries in the subregion and links debt indicators to growth and development. In addition, we use panel regression methodology to examine the subject matter. There exists two conceptual approaches in examining fiscal sustainability: accounting approach; and the present value budget constraint (PVBC) method. The PVBC approach involves the use of econometric techniques while the accounting approach centres on a number of fiscal sustainability indicators such as debt – GDP ratio, debt-to-export ratio, total revenue to GDP ratio and total debt

service/export. Based on the accounting approach, a primary deficit (or surplus) is defined as sustainable if it generates a constant debt/GDP ratio, derived from a specified real GDP growth target and constant interest rate. The desire is to ensure that debt burden of countries can be satisfied continuously without significant adjustment in their fiscal policies.

The PVBC approach could be simply formalised through the consolidated public sector government budget constraint:

$$B_t - B_{t-1} = -(R_t - G_t) + rB_{t-1} \quad (1)$$

Where:

B_t = Stock of public debt at period t

R_t = public sector revenue

G_t = Primary public expenditure excluding interest payments on public debt.

r = Return on government debt in period t .

It is important to state that equation (1) excludes public revenues due to money creation (seigniorage revenue). Based on equation (1), if the government runs a primary surplus equal to zero then the stock of debt will grow at a rate equal to the interest rate. Also, where the government runs a primary surplus, the stock of debt will grow more slowly than the interest rate. If the surplus more than offsets interest payments on existing debt then the debt will shrink over time. But, if the government runs a primary deficit, the stock of debt will grow at a rate exceeding the interest rate (Oshikoya *et al*, 2010; Ekpo, 2011). Equation (1) can then be evaluated using the error-correction methodology involving testing the variables to determine its order of integration and applying cointegration properties to the primary balance and public debt as well as other debt indicators. An application of this technique to the WAMZ countries is in Oshikoya *et al*, (2010). Observably, the impact of the global economic and financial crisis is not addressed in Oshikoya *et al*, (2010).

Based on related studies and the realities of countries in SSA and the West Africa subregion, we would estimate a panel regression:

$$Y_t = \beta_0 + \beta_1 D/Y_t + \beta_2 X_t + U \quad (2)$$

Where:

Y_t = growth of real GDP;

D/Y_t = public debt /GDP;

X_t = vector of control variables such as inflation

U = noise term

Equation (2) would take into account other debt indicators, dummies for the war period as well as the global economic crisis of 2008.

Theoretically, the impact of public external debt on economic growth can be examined from both direct and indirect effects (debt overhang hypothesis). From equation (2), the *a priori* expectation of the link between public external debt/GDP variable and relevant indices such as debt service is mixed. The strand of direct effect of public external debt school argues that debt negatively affects economic growth but may have marginal positive effect based on investment pass through. This would be the case if public external debt finances present and future consumption (Fosu, 1996; Iyoha, 1999). On the other hand, the indirect effect of debt on growth stresses the impact by viewing high indebtedness as a tax on future capital which invariably reduces the incentive to save and invest.

Based on the debt overhang analysis, initial accumulation of debt may enhance economic growth up to a threshold; beyond this, high indebtedness may be detrimental to economic growth. This postulation is also predicated on the rate of debt payment obligation and a country's ability to repay its debt. If an economy's debt obligations exceed its ability to pay, then expected future growth is likely to fall. An analysis of this scenario using a debt laffer curve is in Elbadawe, Ndulu and Ndung'u (1997); and Partillo and Ricci (2001).

The link between the rate of inflation and public external debt depends on the magnitude of the former. The relationship is therefore unambiguous. Arguably, unanticipated high rates of inflation can reduce the real cost of servicing the public external debt and if this occurs over a long term, the influence on growth would be positive. Nonetheless, lower rates of inflation would stimulate growth by reducing the cost of investible funds. At what point will inflation become detrimental to growth is an empirical matter suggesting the need to determine the inflation threshold, outside the sphere of this study.

DEBT AND GROWTH: STYLISTED FACTS

Table 1 provides external debt of the top ten SSA countries in 2008. South Africa, the highest indebted is to the tune of almost \$42 billion while the least is Zimbabwe with a debt overhang of US\$5.2 billion. The total external debt of the ten African countries stood at US\$136.6 billion in 2008. Out of the ten countries, Nigeria and Cote d'Ivoire are in the West African subregion and in addition, depend on mineral and commodity exports for revenue. In some of the countries, debt exceeded GDP, for example Zimbabwe had the highest ratio of 186 per cent (World Bank, 2010).

Africa's real GDP grew by 5.6 per cent in 2004 and remained at the same rate during the global economic crisis of 2008. From 2004 to 2011, real GDP in Africa grew on average by 5.3 per cent. However, the growth of real GDP in the ECOWAS and countries in WAMZ exceeded that of Africa during the same period (Table 2 and Figure 1). It is interesting to state that at the height of the global economic crisis, countries in West Africa had a robust growth of 6.3 per cent, higher than the population growth rate of three per cent. The rates of inflation were also impressive in 2008. WAMZ had a rate of inflation of 11.8 per cent – exceeding the African average of 7.7 per cent for 2004 to 2011 (Table 3).

Table 1: External Debt: The Top Ten SSA Countries, 2008

Country	US\$ Billion
South Africa	41.9
Sudan	19.6
Angola	15.1
Cote d'Ivoire	12.6
Congo, Democratic Republic	12.2
Nigeria	11.2
Kenya	7.4
Tanzania	5.9
Congo, Republic	5.5
Zimbabwe	5.2

Source: Ndikumana, L and J. Boyce (2011) *Africa's Odious Debts: How Foreign Loans And Capital Flight bled A Continent*, London, Zed Press

Table 2: Real GDP Growth Rates in West Africa 2004 to 2011 (in %)

Year	Africa	ECOWAS ¹	UEMOA ²	WAMZ ³
2004	5.6	5.1	2.8	6.3
2005	5.9	5.7	4.2	6.4
2006	6.2	5.4	2.9	5.4
2007	6.4	5.6	3.2	6.3
2008	5.6	5.6	3.9	6.1
2009	2.5	5.5	3.0	6.3
2010	5.4	6.8	4.0	7.7
2011	5.2	5.7	3.1	6.6
Average	5.3	5.7	3.1	6.6

Source: West African Monetary Agency (WAMA) *Macroeconomic Convergence Report, 2011*

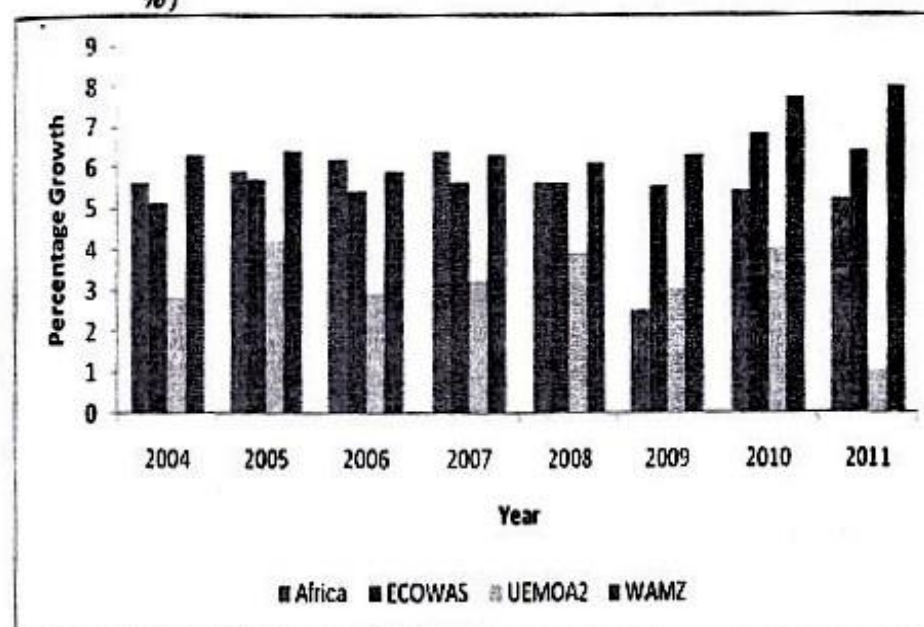
Notes:

¹Economic Community of West African States

²UEMOA – Union Economique et Monetaire L'Ouest-africa (West African Economic and Monetary Union) comprising Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo

³West African monetary zone consists of The Gambia, Ghana, Guinea, Liberia, Nigeria and Sierra Leone.

ECOWAS comprises UEMOA and WAMZ including Cape-Verde; however, data exclude the latter.

Figure 1: Real GDP Growth Rates in West Africa, 2004 to 2011 (in %)**Table 3: Inflation Rates in West Africa, 2004 to 2011 (in %)**

Year	Africa	ECOWAS	UEMOA	WAMZ
2004	10.4	5.2	2.7	8.4
2005	9.1	5.7	2.9	9.2
2006	8.6	5.4	2.7	7.2
2007	6.3	6.3	2.9	15.2
2008	7.1	13.6	8.5	11.8
2009	6.4	0.2	0.9	13.1
2010	6.3	9.9	1.4	12.6
2011	7.7	8.2	3.2	11.2
Average	7.7	8.2	3.2	11.2

Source: see Table 2.

When we examined individual countries, Benin registered a growth rate of 5.0 per cent in 2008; Niger 9.6 per cent and Togo 2.4 per cent for the same year. In WAMZ, The Gambia had a growth rate of 6.1 per cent and Sierra Leone 4.0 per cent in 2008. In 2009, Nigeria's economy grew at seven per cent (WAMA, 2010). Almost all the Franco-phone countries had single-digit rate of inflation for 2005 to 2010. On the other hand, countries in the WAMZ were characterised by double digit rates of inflation except The Gambia that stood at 6.8 per cent in 2008 and reduced to 5.0 per cent in 2010. It is clear that the robust macroeconomic management of economies in the West African subregion resulted in their being able to withstand the shock of the global economic and financial crisis of 2007 to 2008 (Table A.2 in the Appendix).

It appears the subregion maintained an appropriate deficit/GDP ratio for 2004 to 2011. In the WAMZ countries as a whole, deficit/GDP ratio declined from 5.8 per cent in 2004 to 3.8 per cent in 2011. The highest ratio of 10.5 per cent was recorded in 2005 when Nigeria and Sierra Leone registered deficit/GDP rates of -27.8 per cent and -2.6 per cent respectively. In the same year, Guinea Bissau had a deficit/GDP ratio of 24.2 per cent. In 2009, Burkina Faso showed a deficit/GDP ratio of 13.8 per cent similar to that of Cote d'Ivoire (Table A1 in the Appendix).

Figure 2: Inflation Rates in West Africa, 2004 to 2011 (in %)

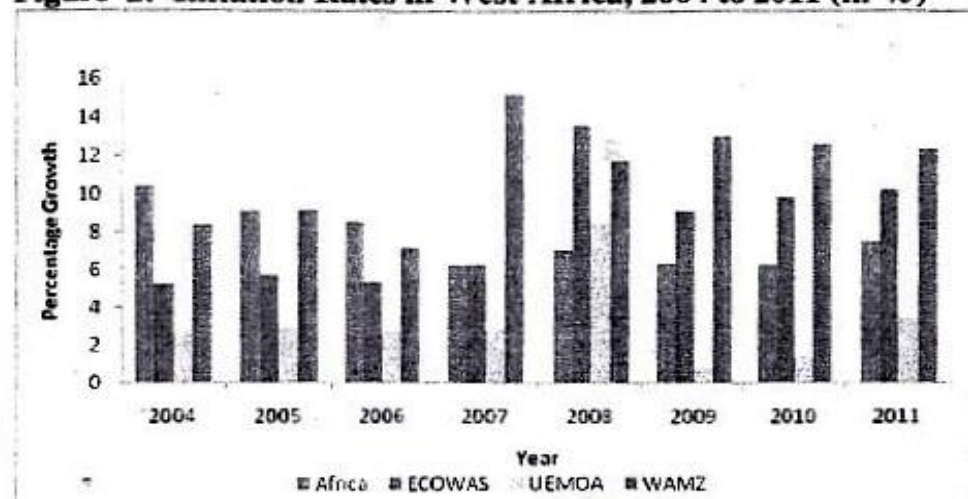


Table 4: Budget Deficit/GDP in West Africa, 2004 – 2011 (in %)

Year	Africa	ECOWAS	UEMOA	WAMZ
2004	-	-	-	5.8
2005	-	-	-	10.5
2006	-	2.8	5.1	1.7
2007	-	2.9	5.1	2.2
2008	2.2	2.4	4.3	1.8
2009	4.4	3.2	2.5	3.4
2010	3.3	3.8	3.2	4.0
2011	1.9	3.7	3.2	3.8

Source: see Table 2

Notes: Budget includes grants.

Table 5 shows the external debt/GDP ratio for countries in West Africa. For ECOWAS, the external debt/GDP averaged 14.6 per cent from 2004 to 2011. However, for UEMOA, external debt/GDP averaged 33.2 per cent for 2004 to 2011. On the other hand, for WAMZ countries, external debt/GDP remained low averaging 6.4 per cent for the same period. The aggregate figures may be misleading when compared with the performance of individual countries. In 2008, the external debt of Ghana stood at US\$5.0 billion and that of Nigeria was US\$11.2 billion and Guinea US\$3.1 billion representing an external debt/GDP ratio of 31 per cent, 5 per cent and 72 per cent respectively.

In 2009, Guinea Bissau had an external debt/GDP of almost 128 per cent and Liberia 208.7 per cent. Liberia as a post-conflict economy recorded large external debt to finance infrastructural development. Sierra Leone, also a post conflict country recorded impressive debt/GDP ratio. It is important that external debts incurred by these countries are sustainable.

Ndikumana and Boyce (2011) contend that African debts are odious, stressing how the debts were utilised in transforming the economies of Africa. "It is also worth noting that the definition of odious debt does not rest simply on a comparison between

benefits and costs..... the costs to the public of servicing odious debt exceed its benefits, since the latter are zero" (*Ibid*: 88). They also argue that the cost of African debt service can be measured in human as well as in financial terms. If the billions in debt servicing were invested in health and education, millions of lives could have been saved in Africa. The impact of public debt on the growth process particularly during the height of the global economic crisis remains an empirical matter.

Figure 3: Budget Deficit/GDP in West Africa, 2004 to 2011 (in %)

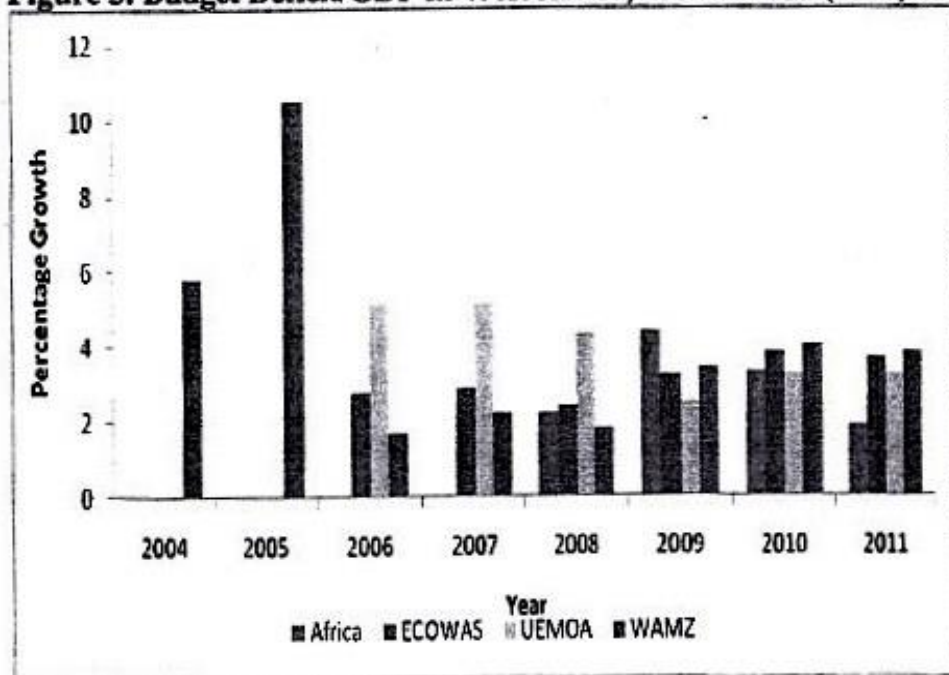


Figure 4: External Debt/GDP in West Africa, 2004 to 2011 (in %)

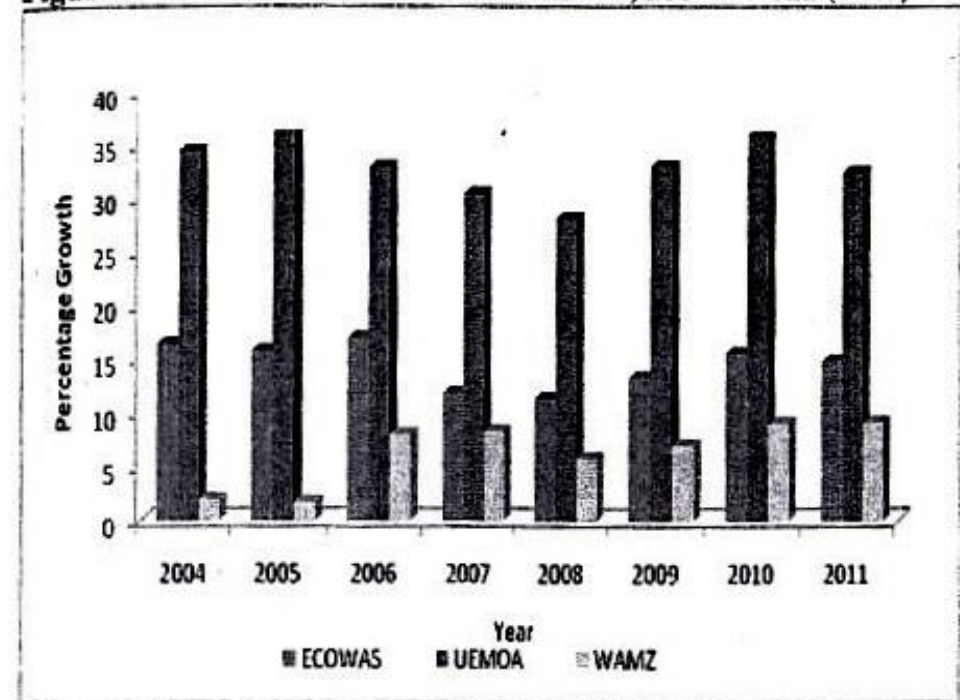


Table 5: Debt/GDP in West Africa 2004 to 2011 (in %)

Year	ECOWAS	UEMOA	WAMZ
2004	16.4	34.5	2.0
2005	15.8	37.8	1.7
2006	17.0	33.0	8.1
2007	11.9	30.5	8.4
2008	11.4	28.2	5.9
2009	13.4	33.1	7.1
2010	14.9	32.5	9.2
2011	14.9	32.5	9.2
Average	14.6	33.2	6.4

Source: West African Monetary Agency, Freetown, Sierra Leone

Total external debt as a ratio of export of goods and services fluctuated over 2001 to 2009. For ECOWAS, the total external debt/export declined from 596.3 per cent in 2001 to 296.9 per cent in 2007 and further to 139.4 per cent in 2009. Given that the ratio is not increasing, points to some evidence of sustainability of total debts in ECOWAS. The declining trend is noticeable in all the countries (WAIFEM, 2010, p.191).

EMPIRICS AND IMPLICATIONS FOR ECONOMIC INTEGRATION

Figures 5 to 10 show the trend analysis of real GDP, rate of inflation and deficit/GDP in ECOWAS for 2004 to 2011. For ECOWAS, inflation peaked in 2008 at around 13 per cent and flattened thereafter at 9.5 per cent in 2011. The pattern is similar for WAMZ and UEMOA. The deficit/GDP ratios for WAMZ and ECOWAS confirm the import of getting the fiscal side right if economic integration is to be realised. Most of the countries exceeded the benchmark of debt/GDP ratio. Notably, it is understandable that economies such as Liberia and Sierra Leone needed to borrow to finance infrastructural development after the war.

Figure 5: Real GDP Growth, Inflation and Deficit/GDP in ECOWAS, 2004 to 2011 (in %)

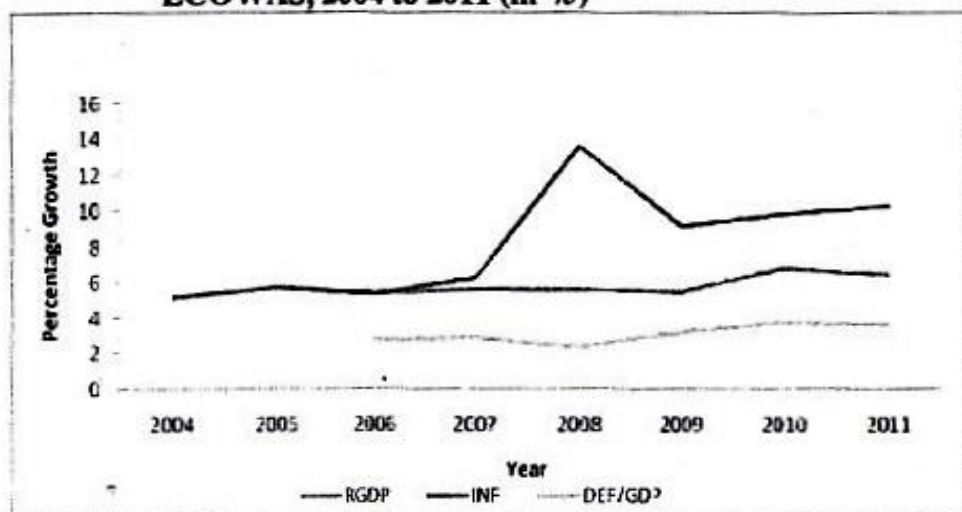


Figure 6: Real GDP Growth, Inflation and Deficit/GDP in UEMOA Countries, 2004 to 2011 (in %)

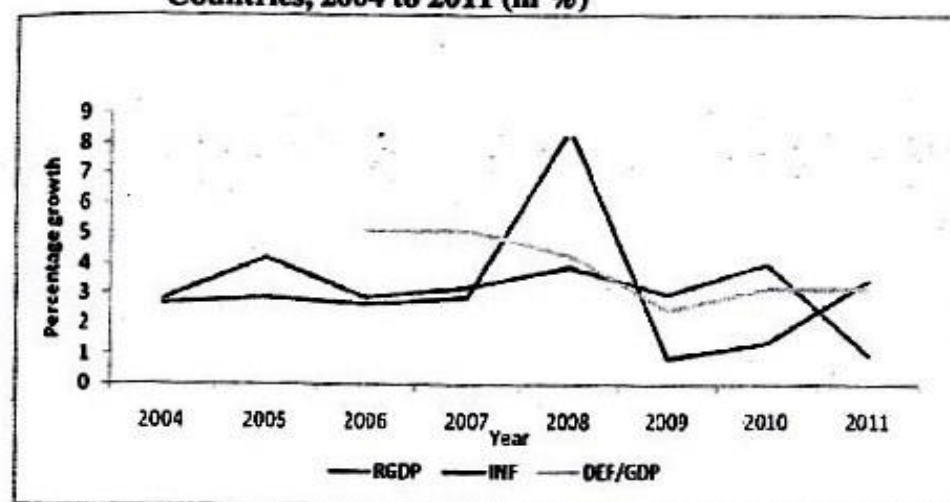
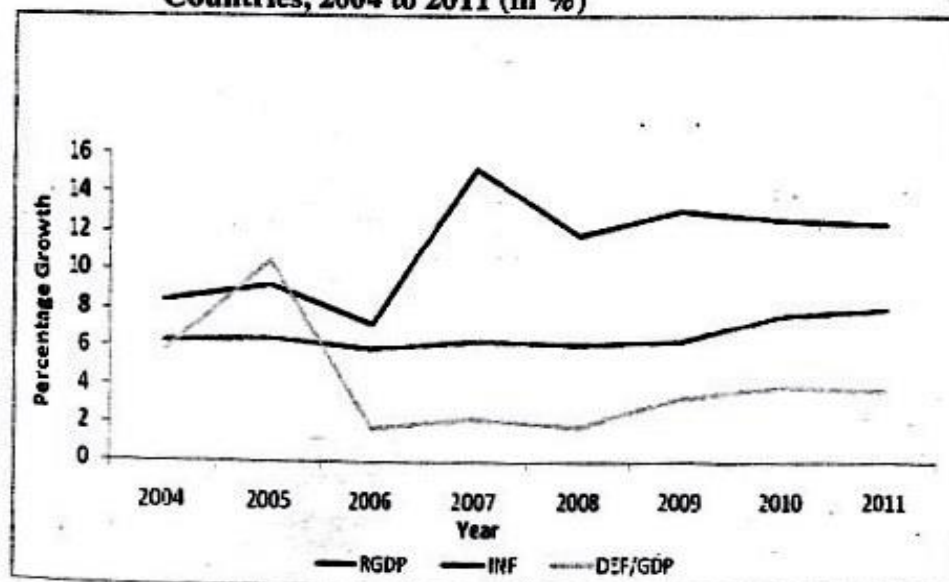


Figure 7: Real GDP Growth, Inflation and Deficit/GDP in WAMZ Countries, 2004 to 2011 (in %)



Tables 6 to 10 present regression results for Africa in general and ECOWAS particular; panel regression results for 42 SSA countries show that public debt had no significant impact on real GDP per capita for 2004 to 2011. The debt/GDP variable is also statistically significant; a ten per cent increase in debt would reduce real GDP per capita by about two per cent. In addition, the rate of inflation indicated a negative impact on real GDP per capita and is statistically significant. Both inflation and debt exhibited similar pattern during the height of the global economic and financial crises. That is, the global economic crisis did not change the behaviour and impact of the rate of inflation and debt on real GDP per capita. If we proxy real GDP per capita as a measure of development then it follows that debt and the rate of inflation have negative relationship with development.

For the 15 ECOWAS, the results appear mixed. Debt/GDP indicated a negative relationship with real GDP growth and is statistically significant. This runs counter to expectation, suggesting that public external debt may be financing consumption rather than productive activities. The rate of inflation exhibited a positive relationship and is also statistically significant – implying that an increase in the rate of inflation stimulates growth in GDP. This is possible and points to the need to determine the inflation threshold for the economies in the West African subregion. There is a possibility that the rate of inflation may not be adverse to growth up to a point, suggesting the import of ascertaining the turning point. In addition, the debt/export of goods and services ratio had a positive relationship to both growth in real GDP and its per capita measure but the variable is not statistically significant.

Table 6: Cross-Sectional Results (2008)
Dependent Variable: Real GDP Per Capita

Variable	Coefficient	Std.Error	t - statistic
C	4.3618	1.2168	3.5845
D/y	-0.0126	0.0094	-1.3339
Inf.	-0.02035	0.0101	-2.0153
$R^2 = 0.22$		Akaike Info criterion 4.945	
F - statistics = 3.15		Schwarz Criterion 5.117	
		D.W 1.97	

Where:

D/Y = public debt/GDP

Inf. = rate of inflation

All variables tested for their time series properties exhibited I (0).

Table 7: Panel Results: ECOWAS

Dependent Variable: Real GDP Growth

Variable	Coefficient	Std.Error	t. statistic
C	4.6658	0.5499	8.4840
D/y	-0.0212	0.0070	-3.0116
Inf.	0.1197	0.0495	2.4165
D/Exp.	0.0027	0.0021	1.3064
$R^2 = 0.25$		Akaike Info. criterion 4.9296	
F - statistics = 9.645		Schwarz Criterion 5.0422	
		Durbin-Watson = 1.767	

Where:

D/Exp = Debt/Export of goods and services

Table 8: Panel Results: ECOWAS

Dependent Variable: Real GDP Per Capita

Variable	Coefficient	Std.Error	t. statistic
C	2.0070	0.5574	3.6004
D/y	-0.0163	0.0071	-2.2889
Inf.	0.1183	0.0502	2.3556
D/Exp.	0.0014	.0021	0.6585
$R^2 = 0.24$		Akaike Info. criterion 5.0693	
F - statistics = 8.534		Schwarz Criterion 5.0693	
		Durbin-Watson = 1.6	

Where:

D/Exp = Debt/Export of goods and services

Figure 8: Real GDP Growth and Deficit/GDP in ECOWAS , 2004 to 2011 (in %)

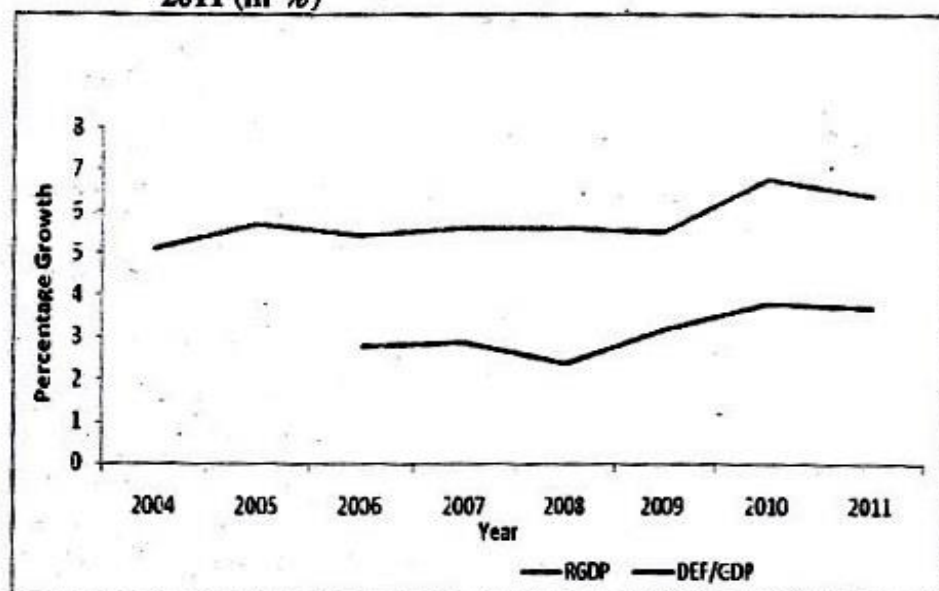


Figure 9: Real GDP Growth and Deficit/GDP in UEMOA , 2004 to 2011 (in %)

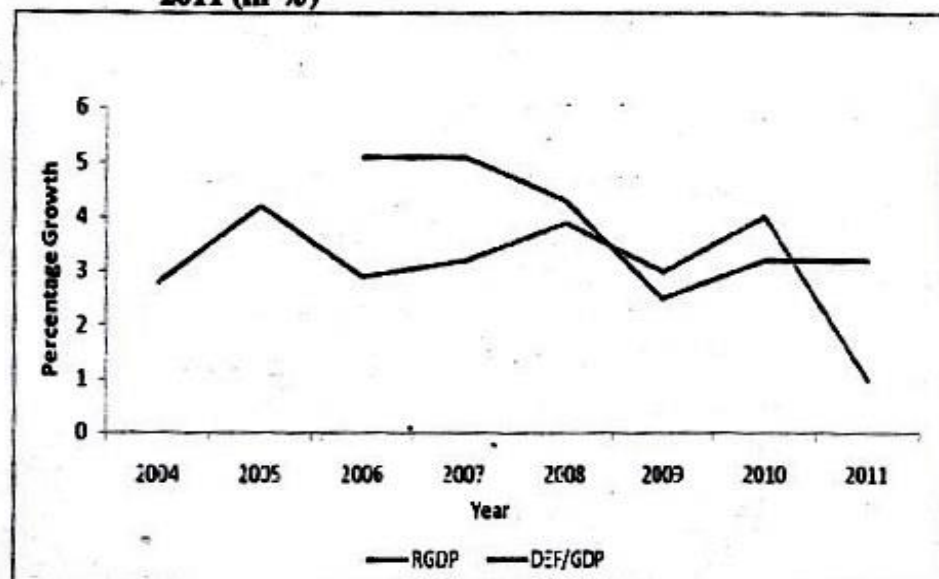
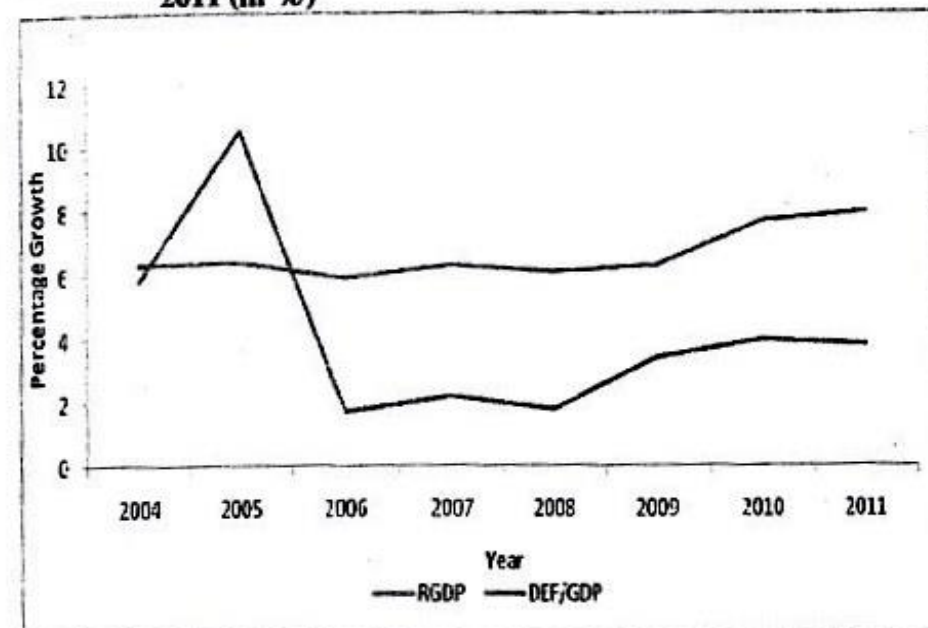


Figure 10: Real GDP Growth and Deficit/GDP in WAMZ , 2004 to 2011 (in %)



The global financial crisis appears not to have a positive relationship to growth in real GDP as its per capita measure. The negative sign of the dummy variable gives that indication. It is necessary to state that though the regression results may not provide robust results as indicated by the known tests, they provide some measure of causal relationship between the variables. It is, therefore, important that the regression results be interpreted with caution and read with the stylised facts.

Table 9: Panel Results: ECOWAS
Dependent Variable: Growth in Real GDP

Variable	Coefficient	Std. Error	t. statistic
C	4.6834	0.5566	8.4130
D/y	-0.0213	0.0071	-3.0065
D/Exp	0.0028	0.0021	1.3056
Inf.	0.1231	0.0512	2.3997
Dum (2008)	-0.2689	0.9777	-0.2750
R ² = 0.26		Akaike Info. criterion 4.9515	
F – statistics = 7.17		Schwartz Criterion 5.0922	
		Durbin-Watson = 1.76	

Table 10: Panel Results: ECOWAS
Dependent Variable: Real GDP Per Capita

Variable	Coefficient	Std. Error	t. statistic
C	2.0079	0.5645	3.5568
D/y	-0.0163	0.0072	-2.2715
D/Exp	0.0014	0.0021	0.6547
Inf.	0.1184	0.0520	2.2777
Dum (2008)	-0.0139	0.9914	-0.0140
R ² = 0.23		Akaike Info. criterion 4.9794	
F – statistic = 6.324		Schwartz Criterion 5.0922	
		Durbin-Watson = 1.66	

Countries in the subregion desirable of economic integration and a monetary union must ensure fiscal discipline. Fiscal deficit financed through external borrowing will increase the external debt burden and reduce external sustainability. It is crucial to avoid a debt overhang that would result in financial fragility of member countries; debt-servicing obligations tend to crowd out resources for social services thus worsening the poverty situation. Therefore, countries must reduce their fiscal *rascality* syndrome because protracted fiscal imbalances by one member countries could produce negative externalities for the monetary union through an increase in real interest rate, a reduction in public investment and invariably reduced growth potential for all members. The present Euro debt crisis is an excellent example on the need to ensure fiscal discipline by all members in a monetary union. Fiscal policies in countries in the West African subregion

must be sustainable in the short and medium-terms for economic integration and eventual monetary union.

CONCLUSION

We examined public debt and growth in selected West African countries for 2004 to 2011. The rising debt profile of countries in the ECOWAS, UEMOA and WAMZ suggests the need for fiscal discipline if money union is to be realised. The debt profile showed that public debt in SSA has increased over time. From US\$70,768.0 million in 2002, public external debt jumped to US\$01.399/0 million but declined thereafter. Nonetheless, by 2009, public external debt of the ECOWAS stood at US\$49,953.0 million. The total external debt of the top ten African countries was US\$136.6 billion in 2008.

From 2004 to 2011, real GDP in Africa grew on average by 5.3 per cent. The growth of real GDP in ECOWAS and WAMZ exceeded that of other SSA countries for the same period. At the height of the global economic crisis in 2008, countries in West Africa registered a robust growth rate of 6.3 per cent with impressive rates of inflation averaging 11.8 per cent. It seems the subregion maintained an appropriate deficit/GDP ratio for 2004 to 2011. In WAMZ, deficit/GDP declined from 5.8 per cent in 2004 to 3.8 per cent in 2011. The highest ratio of 10.5 per cent was recorded in 2005 when Nigeria and Sierra Leone had high negative deficit/GDP of -27.8 per cent and -2.6 per cent respectively.

For the 15 West African countries, debt/GDP showed a negative relationship with growth of real GDP while the rate of inflation had a positive effect on the growth of real GDP and its per capita measure. It may be that public external debt was used to support consumption rather than production thus the unexpected result of a negative relationship. In addition, debt/export of goods and services was positively related to growth in real GDP but statistically insignificant. The regression results should be read alongside the stylised facts. The members of ECOWAS must ensure fiscal discipline so that their debt profile can be sustainable.

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