

Does Democracy Enhance Economic Growth?

The case of Anglophone West Africa

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ABSTRACT

This article investigates the relationship between democracy and economic growth in five Anglophone West African countries using annual data from 1970 to 2014 and dynamic panel data estimation techniques which control for endogeneity, heteroscedasticity and spatial effects. The findings for the full sample estimation show a negative relationship between democracy and economic growth, however country specific differences apply. Consistent with the sceptical view we conclude that several other factors influence the ability of countries to grow, besides which political regime is in place. These factors among others are capital investments, human capital development, a productive labour force and technological progress.

INTRODUCTION

The relationship between democracy and economic growth has generated extensive research and policy interest for centuries (Hobbes 1651; Harrington 1656). Empirical evidence to this effect has also been largely mixed. While some studies have found a positive relationship between democracy and economic growth (Gerring *et al.* 2005; Persson and Tabellini 2009; Thacker 2011), others have found a negative relationship or no relationship at all (Fayad, Bates and Hooper 2011; Acemoglu *et al.* 2005, 2008 & 2009). In addition Barro (1996) also found a non-linear relationship between democracy and economic growth whereby



democracy enhances growth at low levels of political freedom but depresses growth after a certain level of political freedom has been attained. A more intense debate is the direction of causality between the two variables; democracy and economic growth. Is it democracy that enhances economic growth or countries that are growing are more likely to improve their participatory and representative institutional processes? In this regard several hypotheses and views have emerged in this debate, namely; the complementary view, modernisation hypothesis, conflict view and the sceptical view.

The Complementary View (Goodin 1979; King 1981; Goodell and Powelson 1982) believes that democratic processes, civil liberties, property and political rights create the enabling environment that fosters sustained and equitable economic growth and development. The complementary view postulates that political pluralism as in a democratic system of governance is a prerequisite to economic pluralism which induces growth. Empirical evidence that supports the complementary view shows that democratic states grow faster than non-democratic states (Minier 1998). Democracy is more conducive for investment which has a positive effect on growth (Goodwell and Powelson 1982) and in Asia electoral democracy by itself has been found to increase growth and investment (Rock 2008). Thus the complementary view seems to suggest that the direction of causality is from democracy to economic growth.

In contrast the modernisation hypothesis (Lipset 1959) purports that higher levels of economic growth are a prerequisite for democracy and an important foundation for democratisation. Wealthier countries are more likely to become democracies and sustain it as compared to poor nations. Lipset (1959) postulated that democracy emerges from already existing conditions such as wealth, urbanisation, education and industrialisation. As countries become richer these supporting institutions of democracy are further strengthened, stabilising and maturing democracy in the process. The modernisation hypothesis contradicts the direction of causality between democracy and growth posited by the complementary view. Empirical evidence based on this view is that the more developed a country is the more probable it is for democracy to be sustained (Barro 1996). Economic development leads to higher levels of education, urbanisation, modern values, rationalism and freedom of speech, thereby allowing for the corresponding political development to emerge – participatory democracy (Huntington 1968).

The Conflict View on the other hand believes that autocratic regimes are more likely to improve public welfare by halting all growth retarding developments by the use of force (Hobbes 1651). This is referred to as “developmental dictatorship” in which the masses must be made to work, sacrifice and obey (Gregory 1979). In the conflict view democracies are seen as “weak and fragile institutions which lend themselves to popular demand at the expense of profitable investments” (Doucouliagos and Ulubasoglu 2008). Peev and Mueller (2012) suggests that democratic governments result in huge fiscal deficits and public debt, which negatively impacts on economic growth, and these huge fiscal deficits are driven by the size of government, demands for income redistribution to low-income groups and rent seekers driving unproductive profit seeking expenditure (Kruger 1974; Bhagwati 1982).

Furthermore the Sceptical View argues that the relationship between democracy and economic growth is not that straightforward and that causality is difficult to measure (Rodrik and Wacziarg 2005; Papaioannou and Siourounis 2007). Several intermediate and control variables as well as different methodologies have resulted in varying results (Battercharya *et*

al. 2013), giving the impression that empirical findings are region or methodology specific. The concepts of democracy and economic growth within themselves have also evolved over the years. This further complicates the relationship between democracy and economic growth and the direction of causality between the two variables. The distinction is further made in the literature between endogenous democracy, which is internally driven, and exogenous democracy influenced by external factors such as preconditions to development assistance (Przerworski and Limongi 1997).

Most of the studies cited above are related to developed countries or developing countries in other regions like Latin America and Asia. Sub-Saharan has not received adequate attention in the literature on the relationship democracy and economic growth. Notable among Sub-Saharan specific literature are Aggad (2013) who found evidence of the modernisation hypothesis in a study of 15 West African countries using data from 1970 to 2009 – positive relationship, economic growth enhances democracy. On the contrary, Chisadza and Bittencourt (2014) found a negative and significant relationship between income and democracy in a panel study of 48 Sub-Saharan African countries using data from 1960 to 2010 and dynamic panel data estimation techniques. The closest study to this article is therefore Aggad (2013). However Aggad (2013) failed to control for cross sectional dependence which is critical in any panel estimation of countries in the same region. This is because beside country specific effects, countries in the same region have regional protocols they adhere to, a high level of movement of people and good across borders, spillover effects of political conflict and natural disasters as well and similarities in the underlying economic structures of their respective economies. These factors translate into strong spatial effects which need to be controlled for in panel data estimations of sub-regions especially on the African continent which has had a long history of political instability and their attendant humanitarian crisis that have spilled over across borders. Although Chisadza and Bittencourt (2014) controlled for spatial effects, the size of their dataset did not permit the use estimation approaches that yield country specific results to enable cross country comparisons.

This study therefore fills these gaps in previous research on the relationship between democracy and economic growth in Sub-Saharan Africa by using estimation techniques that do not only control for spatial effects but also permit for cross country comparisons. This study adds to scarce literature on democracy and economic growth in Sub-Saharan Africa by looking at Anglophone West African states using data from 1970 to 2014. We seek to establish two things; what has been the relationship between democracy and economic growth in the selected Anglophone West African states over the sample period and are there any country specific differences? This article focuses in Anglophone West Africa for a number of reasons. First Anglophone West African countries have seen more political instability since independence than their francophone West African counterparts, in terms of switches between military governments and civil/democratic governments. Second, Anglophone West African countries have less control from former colonial masters as compared to their francophone counterparts who are still largely managed by France. The French influence and control of francophone West African countries has yielded more political and economic stability over time, a uniform monetary policy framework with a francophone central bank, and quick intervention in and resolution of political conflicts by France. Thus the Anglophone West African countries have experienced a greater reality of the challenges of independent developmental states and their attendant conflicts compared



to their francophone counterparts. Anglophone West Africa therefore serves as an excellent case study for this article as opposed to the entire West African region. We control for endogeneity, heteroscedasticity and cross-sectional dependence

DATA AND METHODOLOGY

Annual data is used in this article from 1970 to 2014¹. All variables are from the World Bank, NYU Research Institute and Polity IV database.

These are real GDP per capita (*rgdpch*), human capital development (*hdev*), degree of urbanization (*urban*), technology (*tech*), capital investment (*ki*), labour (*lfpr*), democracy (*democ*). Table 1 provides a description of the data sources and definition of variables.

The countries in the panel became independent at different times, experienced regime changes at different times and external shocks at different times – country specific effects – heterogeneity. At the same time these countries are located in the same region, belong to the same regional protocols and have a high degree of cross border trade. Their economies are mostly agrarian in nature with a few recent oil discoveries. There are spill over effects during political conflicts such as the civil wars on Liberia and Sierra Leone in the 1990s – strong spatial effects–cross-sectional dependence.

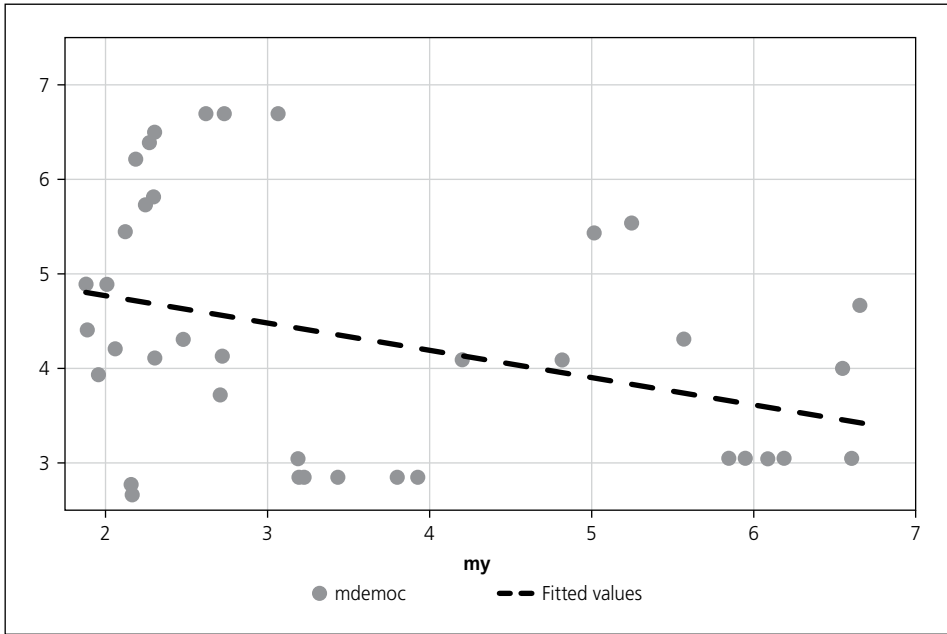
Table 1: Data sources and definition of variables

	Variable	Source	Definition
<i>rgdpch</i>	Real GDP per capita	Penn World Table 7.1	Gross domestic product to population ratio
<i>democ</i>	Democracy	Polity IV Project	A combined score obtained by subtracting the autocracy score from the democracy score. It ranges from +10 (strongly democratic) to -10 (strongly autocratic). It is then normalised to 1
<i>hdev</i>	Human capital development	World Bank/NYU Research Institute	Percentage of the population above 15 years who completed primary school education. Interpolated to fill in gaps of 5 year intervals
<i>urban</i>	Degree of urbanisation	World Bank	Urban population as percentage of total population
<i>tech</i>	Technology	World Bank	Number of phone lines per 100 people
<i>ki</i>	Capital investment	World Bank	Gross fixed capital formation as a percentage of GDP
<i>lfpr</i>	Labour	World Bank	Labour Force participation Rate

There is some degree of endogeneity caused by omitted variable bias emanating from the human development variable. Serial correlations and heteroscedasticity are also present violating the assumptions of the classical linear regression model (CLRM). We therefore specify a dynamic panel model in (1) as follows;

$$\Delta y_{it} = \alpha + \beta_i X_{it} + \mu_i + v_{it}$$

Figure 1: Scatter diagram of democracy and real GDP per capita



To address these characteristics of the dataset the data is estimated using appropriate dynamic panel data estimation techniques that control for spatial effects, endogeneity, serial correlation and heteroscedasticity. These are the panel corrected standard errors (PCSE) by Beck and Katz, (1995) and seemingly unrelated regressions by Zellner (1962). The panel corrected standard errors are applicable when $T > N$, it uses OLS parameter estimates but replaces the OLS standard errors with panel corrected standard errors. It also takes into account spatial effects and heteroscedasticity. Seemingly Unrelated Regressions of Zellner (1962) are suited for estimations with cross-sectional dependence when $T > N$ and allows for country specific analysis and cross country comparisons.

The scatter plot between democracy and economic growth shows a negative relationship. This indicates that for the countries in this panel as a whole, democratic dispensations of governance are associated with lower levels of economic growth. The empirical estimations throw more light into this relationship for the sample as a whole as well as for specific countries.

EMPIRICAL RESULTS

The full sample estimation shows an overall negative relationship between democracy and economic growth in Anglophone West African States. This finding aligns with Chisadza and Bittencourt (2014); negative and significant relationship between income and democracy for 48 Sub-Saharan African States. As expected and consistent with standard growth theory, capital investments, human capital development and the level of technology contribute positively to economic growth for the countries in the panel. Country specific results reveal country specific differences in the relationship between democracy and economic growth. The

results for Gambia and Ghana show no significant relationship between economic growth and democracy. Liberia and Sierra Leone; two post conflict countries, reveal a negative relationship between democracy and economic growth – probably one of the triggers for the conflicts

Table 2: Panel Corrected Standard Errors: Dependent Variable: $\Delta rgdpch$

Variables	Model 1	Model 2	Model 3
<i>democ</i>	-0.13 *** [0.03]	-0.12*** [0.02]	-0.03 [0.02]
<i>hdev</i>	0.40***	0.36*** [0.08]	0.21** [0.08]
<i>urban</i>	-0.90*** [0.15]	-0.16*** [0.02]	-0.14*** [0.02]
<i>tech</i>		0.23*** [0.04]	0.41*** [0.04]
<i>ki</i>			0.08*** [0.03]
<i>lfpr</i>			-0.23*** [0.02]
<i>R-squared</i>	0.29	0.39	0.57
<i>Wald Stat (Prob)</i>	77.04 (0.00)	107.67(0.00)	377.16(0.00)
***/**/* denote 1%, 5% and 10% levels of significance respectively. Standard errors parenthesis			

Table 3: SUR: Dependent Variable – $\Delta rgdpch$

	Gambia	Ghana	Liberia	Nigeria	Sierra Leone
<i>polity</i>	0.01 [0.06]	0.04 [0.03]	-0.12*** [0.02]	0.09*** [0.03]	-0.28*** [0.03]
<i>hdev</i>	-0.53*** [0.18]	0.88*** [0.24]	0.40*** [0.12]	-0.24** [0.09]	0.23*** [0.05]
<i>urban</i>	0.15*** [0.04]	-0.38 [0.26]	-0.35 [0.40]	-0.77** [0.30]	-0.74*** [0.14]
<i>tech</i>	-0.21** [0.11]	0.03 [0.05]	-0.01 [0.16]	0.52*** [0.11]	0.02 [0.14]
<i>ki</i>	0.08 [0.07]	0.19*** [0.07]	0.18 [0.14]	0.04 [0.04]	0.13*** [0.02]
<i>lfpr</i>	0.78*** [0.25]	0.84*** [0.20]	0.11** [0.47]	0.28*** [0.02]	0.18*** [0.01]
Breusch-Pagan Test for independence: $\chi^2_{(10)} = 7.151$. Prob = 0.7111 ***/**/* denote 1%, 5% and 10% levels of significance respectively. Standard errors parenthesis					

Nigeria shows a positive relationship between democracy and economic growth. The differences in the country specific results are consistent with mixed research findings in the literature where some studies have found a positive relationship between democracy and economic growth, others found a negative relationship and in other instances no relation was found.

Human capital development contributes positively to economic growth in Ghana, Liberia and Sierra Leone but not in Nigeria and Gambia. Urbanisation does not enhance economic growth in all the countries in the panel except in Gambia. With the exception of Nigeria, technological progress is not at the level that enhances economic growth in the rest of the countries. Capital investments have a positive impact on economic growth for all the countries in the panel although only significant for Ghana and Sierra Leone. Labour force participation positively impacts on economic growth in all the countries in the panel underlining the labour intensive production base of Anglophone West African states

CONCLUSION

This article set out to investigate the relationship between democracy and economic growth in Anglophone West African states, and whether consistent with the literature there were country specific differences. Data from 1970 to 2014 and dynamic panel estimation techniques were employed, controlling for endogeneity, spatial effects, serial correlation and heteroscedasticity. Two estimations were done; a full sample estimation using panel corrected standard errors by Beck and Katz (1995), and country specific estimations using seemingly unrelated regressions by Zellner (1962).

In the full sample estimations we found a negative relationship between democracy and economic growth, aligning with earlier findings of Chisadza and Bittencourt (2014), and contradicting the findings of Aggad (2014) who did not control for spatial effects. In addition several other factors influence the ability of countries to grow, besides which political regime is in place. These factors among others are capital investments, human capital development, a productive labour force and technological progress. Again country specific differences emerge with respect to the relationship between economic growth and these mitigating factors. The results therefore confirm that divergent findings of studies into the relationship between democracy and economic growth could be attributable to differences in regions, countries and empirical methodology (Battercharya *et al.* 2013).

Consistent with the sceptical view in the literature on the democracy-economic growth nexus we therefore conclude that democracy is not a panacea for economic growth in Anglophone West African countries. It must be accompanied by good governance and a healthy investment climate to attract the required levels of capital investment, human capital development that impacts on growth, technological progress and a productive labour force.

NOTE

1 The countries in this study are Gambia, Ghana, Liberia, Nigeria and Sierra Leone.

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