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Foreign Capital, Domestic Policy, and Economic Growth: The Case of Nigeria

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Abstract

In spite of a myriad of developmental challenges, Nigeria emerged as the largest economy in Africa in 2014, surpassing South Africa for the first time. Nigeria's economy has been growing at an average rate of 7 percent for the last few years. What are the factors driving this remarkable growth in the economy?

This paper explores the factors responsible for the phenomenal growth in Nigeria's economy. Factors such as foreign capital, domestic policies, trade openness, and labor force participation rate are examined. Utilizing data from the World Bank, empirical estimations confirm that the major drivers of economic growth in Nigeria are labor force participation rate, monetary policy, and foreign direct investment. Surprisingly, fiscal policy and foreign aid are not statistically significant drivers of economic growth in Nigeria.

Keywords: *Foreign aid, Foreign direct investment, Remittances, Openness, Policy, Sub-Saharan Africa, Nigeria*

JEL Classification: *F24, F35, F43, F63*

1. Introduction

The impact of foreign aid on the economic development of less developed countries (LDCs) remains a controversial issue. Part of the controversy results from the fact that the foreign aid "industry' is worth over $200 billion per year. With this amount of resources at play, the influence of entrenched stakeholders makes it a herculean task to objectively assess the effectiveness of aid. While the controversy on the effectiveness of foreign aid rages on, empirical studies are revealing

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further that the robustness of many of the other variables considered in these cross-country studies are equally in question. Before the decision to jettison foreign aid is taken, it is necessary to convincingly demonstrate the ineffectiveness of aid flows that are now permanent and indispensable features of the budgets of many national governments in LDCs.

Numerous studies have attempted to ascertain the effectiveness of foreign aid. The major problem with these studies is that there are just as many studies that find aid effective as ineffective, thereby leaving the consumers of this body of knowledge totally confused. Lately though, there is a sort of understanding that cross-country studies that lump all LDCs together may be inadvertently contributing to the confusion as to the effectiveness of aid. Recognizing that the "one size fits all" solution may not exist for the economic growth issues in LDCs, there is therefore a move to examine individual countries as to the effectiveness of aid and other variables employed in cross-country studies.

This study, therefore, supports this new shift in orthodoxy by examining the effectiveness of aid and other variables in arguably one of the most important countries in Sub-Saharan Africa (SSA) – Nigeria. Not only is Nigeria the largest country in SSA with a population of 178 million, it equally boasts of the largest GDP in the region at $521.8 billion. Whatever happens in Nigeria will inevitably impact the region negatively or positively. Consequently, it is extremely essential to understand the variables that are the main drivers of economic growth in Nigeria. A search of the literature reveals that there is a dearth of these kinds of studies, and this paper intends to contribute towards filling the gap.

The remainder of this article is organized as follows: Section 2 presents the literature review while the empirical model and data are discussed in section 3. Section 4 discusses empirical estimations, while section 5 concludes the paper.

2. Literature Review

The debate on the effectiveness of foreign aid on economic growth in developing countries has gone through several generations or waves of studies. An attempt will therefore be made to explore some of the studies that have appeared in the last two generations or waves.

Burnside and Dollar (2000) used cross-sectional data in a modified neo-classical growth model to investigate the effectiveness of foreign aid and economic policies on the growth of GDP per capita. They find that, on average, aid has a positive impact on growth in developing countries with good fiscal, monetary and trade policies. Conversely, they find that aid is ineffective in the presence of poor policies. This implies then that aid should be directed at LDCs with good policy environments. According to Dalgaard and Hansen (2001), this policy message started a new wave or generation of studies on the effectiveness of aid on growth. The studies in this wave or generation were concerned with determining if aid was only effective in good policy environments. Dalgaard and Hansen (2001) developed a simple neo-classical growth model that included a "risk of destruction" variable. They used the Burnside and Dollar (2000) data set and found aid to be effective in causing economic growth. Furthermore, they also found the interaction between good policy and aid to be ambiguous, and concluded that good policy is likely to decrease the effectiveness of aid, since they act as substitutes in the growth process.

Easterly, Levine, and Roodman (2003) expanded the Burnside and Dollar (2000) dataset covering (1970 – 1993) by four years (1970 – 1997), filled in missing data for the original time period, and reassessed the links between aid, policy, and growth. They concluded that adding the

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additional data to that used by Burnside and Dollar raised new doubts about the effectiveness of aid.

Ekanayake and Chatrna (2007) test the hypothesis that foreign aid can promote growth in developing countries using panel data series for foreign aid, while accounting for regional differences in Asian, African, Latin American and Caribbean countries and differences in income levels (low income, low-middle income, upper-middle income and all income levels). They derive their model from a production function in which foreign aid is introduced as an input along with labor and domestic capital. Using data on a group of 83 developing countries for the period 1980 to 2007, they find that foreign aid has mixed effects on economic growth in developing countries. Specifically, foreign aid was found to have a positive effect on economic growth only in African countries. When the different income groups were considered, the foreign aid variable had a negative sign for low-middle income countries and a positive sign for the other three.

Hansen and Tarp (2000) surveyed empirical analyses for 30 years that used cross-country regressions (131 regressions) in assessing the effectiveness of foreign aid. They found that even in countries that did not have good economic policies, there was a significant link between aid flows and growth and that aid had a positive effect on growth rate whenever growth was driven by capital accumulation. Hansen and Tarp (2001) investigated modern cross-country growth regressions, using a standard growth model, and found that aid increased the growth rate regardless of whether policy was good or bad in countries. They also found decreasing returns to aid and noted that aid is highly sensitive to the choice of estimator and the set of control variables. They strongly recommended the need for more theoretical work before using the cross-country regression in formulating policy recommendations. Collier and Dollar (2001) developed and estimated a model of efficient aid. They concluded that foreign aid could assist the government and society to provide public services, which include those necessary for poor households to participate in the market economy. They found that aid increased the benefits from good policy (which is determined by a developing country's political process independent of aid) and, simultaneously, good policy increased the impact of aid.

In their study of the impact of foreign capital on economic growth in developing countries, Hasnat, Callahan and Didia (1999) find that foreign aid does not have any statistically significant impact on economic growth. Knack (2001) was concerned with whether or not aid influences the quality of governance. Using cross-country data, Knack found that high levels of aid eroded the quality of governance (as measured by indices of bureaucratic quality, corruption, and the rule of law). Clemens, Radelet, and Bhavnani (2004) found that "aid that plausibly could stimulate growth in four years" or short-impact aid caused growth and the impact of this aid on growth was subject to diminishing returns. Dalgaard, Hansen, and Tarp (2004) found, using a standard overlapping generations (OLG) model that aid, in general, affected long-run productivity. They also found that aid seemed to have been less efficient in tropical areas. They did not find a strong relationship between policy and aid.

In examining the impact of foreign aid on the economic growth of Bangladesh, one of the poorest countries in the world, Islam (1992) finds that in the aggregate, foreign aid does not have a statistically significant impact on economic growth. Similarly, Mbaku (1993) concurs with Islam when he concludes that foreign aid does not have any statistically significant impact on the economic growth of Cameroon. Fasanya and Onakoya (2012) analyzed the impact of foreign aid on economic growth in Nigeria from 1970 to 2010, using the neoclassical growth model. The ordinary least squares method was used to estimate the model, after checking for the stationarity of the variables using the Augmented Dickey-Fuller test. They find that foreign aid positively

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impacts economic growth in Nigeria. This positive impact is however negated by policy variables that can make aid detrimental to economic growth. Sahoo and Sethi (2013) examined the impact of foreign aid on economic growth and development in India for the period 1975-76 to 2009-10, using ordinary least squares. They find that the impact of foreign aid on both economic growth and economic development is positive. However, the impact of foreign aid on economic growth was found to be greater than the impact of foreign aid on development.

Sharma and Bhattarai (2013) examined the impact of aid on the economic growth of Nepal, one of the highest aid recipients in the world. They find that in the presence of sound economic policy, aid contributes to growth. However, they did not find any statistical evidence to suggest that democratic governance and openness had any impact on the effectiveness of aid in Nepal. According to Sharma and Bhattarai, foreign aid had been a main source of capital formation in Nepal. They concluded that donors' self-interests dominated the aid agenda and encouraged corrupt government behavior while discouraging institution building. Sharma and Bhattarai followed Burns and Dollar (2000) in specifying their model. They used three separate policy variables (fiscal policy, monetary policy, and openness) and the autoregressive distributed lag (ARDL) approach to co-integration.

As these previous studies demonstrate, the controversy over the effectiveness of aid on economic growth in developing countries remains unresolved. A survey of available studies clearly indicates that most of the empirical studies on the impact of foreign capital and policy on economic growth are based on cross-country or cross-sectional data. Due to the limitations of cross-sectional studies, the latest generation or wave of studies now emphasize individual country or case studies. Currently, empirical studies that focus on individual countries or case studies are very limited. The current study therefore joins this new wave of studies by focusing on Nigeria.

3. Data and Methodology

Empirical estimations are based on variants of empirical models employed by Burnside and Dollar (2000), Feeny (2005) and Sharma and Bhattarai (2013). In all, these models follow the production function approach where output measured as Real Gross Domestic Product (RGDP) is a function of the usual inputs of capital and labor, aided by technology. Since the efficacy of these inputs is impacted by other factors, including the prevailing economic or business environment in a country, several other variables are added in the empirical model. These variables include government policy, economic openness, foreign capital such as foreign aid and foreign direct investment.

The basic model estimated follows:

$$RGDP = \beta_0 + \beta_1 SAV + \beta_2 AID + \beta_3 LAB + \beta_4 TOPN + \beta_5 FP + \beta_6 MP + U \qquad (1)$$

RGDP represents annual growth rate in real GDP, SAV represents annual gross savings as a percentage of GDP, AID represents annual aid (mainly ODA) received as a percentage of GDP, LAB is the labor participation rate, TOPN stands for trade openness measured as (imports + exports divided by GDP), MP represents monetary policy proxied by the rate of change in annual inflation (change in GDP deflator). According to Milton Friedman, inflation is always and everywhere a monetary phenomenon. Hence, our proxy for monetary policy (MP) is quite in order. FP represents fiscal policy which is proxied by government autonomous spending as a percentage of GDP. U represents the error term. The data on all variables come from the World Bank, except for LAB which comes from the International Labor Organization. The data used cover a period of 1981–

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2011. Some studies such as Sharma and Bhattarai (2013) use M2 and "fiscal deficits as a percentage of GDP" as proxies for monetary policy and fiscal policy respectively. Since both of these proxies are not readily available in Nigeria's case, different proxies are utilized instead.

Because there is so much controversy regarding the effectiveness of aid and the divergent findings of empirical investigations of factors impacting economic growth, this study made a deliberate effort to replicate, as close as possible, the empirical model used in Nepal by Sharma and Bhattarai (2013). This model is also quite similar to the model employed by Feeny (2005) in Papua New Guinea. As of 2014, Nepal, with a population of 28.12 million, has a GDP of $19.29 billion (2013 current $), while Papua New Guinea, with a population of 7.476 million, has a GDP of $15.29 (2013 current $). In contrast, Nigeria has a population of 178.5 million and a GDP of 521.8 billion. Although Nepal and Papua New Guinea are quite small by any measure compared to Nigeria, the motivation for employing identical models is to explore the robustness of the models and results.

Table 1 presents the correlation matrix of variables used in our regressions.

Table 1. Correlation Matrix

	RGDP	RMT	SAV	TOPN	MP	FP	LAB	FDI	AID
RGDP	1.0000								
RMT	0.4928	1.0000							
SAV	0.0782	0.2449	1.0000						
TOPN	0.3282	0.3477	(0.1468)	1.0000					
MP	(0.5123)	(0.2500)	(0.0758)	(0.0433)	1.0000				
FP	0.0779	0.1926	0.1622	(0.5381)	(0.3680)	1.0000			
LAB	0.3364	0.3944	0.0505	0.7547	0.2194	(0.5147)	1.0000		
FDI	0.5224	0.9009	0.2129	0.3464	(0.2707)	0.3180	0.3944	1.0000	
AID	0.3625	0.7023	0.2314	0.1478	(0.1856)	0.0542	0.1733	0.5050	1.0000

4. Empirical Results and Discussion

Previous studies such as Feeny (2005) and Sharma and Bhattarai (2013) emphasize the use of the autoregressive distributed lag (ARDL) approach to co-integration as the preferred model for time-series modeling. The ARDL model's main advantage according to Feeny is that "it can be applied irrespective of whether the regressors are I(1) or I(0)," thereby precluding the uncertainty of unit root pre-testing. In addition, the ARDL model, according to Inder (1993) yields precise estimates of long run parameters and valid t-statistics notwithstanding the presence of endogenous variables.

For empirical estimations, this paper employs the Ordinary Least Squares (OLS) estimation technique using STATA (special edition 10, 2007) software. The standard OLS regression technique is adequate for this analysis due to the nature of data employed. First, auto- correlation, multicollinearity and heteroskedasticity do not pose serious problems as our diagnosis indicates. Clearly, the results of the diagnostic tests for auto-correlation, multicollinearity and heteroscedasticity, which are reported in Tables 2, 3 and 4, indicate that these issues do not pose serious problems here. Second, a table of simple correlations indicates variables that are highly correlated, and these variables are not simultaneously included in the regressions, thereby minimizing multicollinearity issues. Besides, most of the variables are either scaled by GDP

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(ratios) or are introduced as growth rates. This process minimizes the incidence of heteroskedasticity and associated issues.

Table 2 provides the results of the regression analysis with real GDP growth rate (RGDP) as the dependent variable. As the F-statistics of 2.37 and 1.84 in models A and B respectively indicate, the null hypothesis that the regression coefficients are jointly equal to zero cannot be rejected at the 0.05 level of significance. It is therefore immediately apparent that models A and B are deficient in capturing any relationship between RGDP and the independent variables. For models C and D, the F-statistics of 5.28 and 4.32 respectively indicate that the null hypothesis that the regression coefficients are jointly equal to zero can be rejected at the 0.05 level of significance. The adjusted R^2 of 0.417 in model C and 0.399 in model D are within the range observed in these types of studies.

Examining individual estimates, the coefficient of labor participation rate (LAB) is positive as expected and statistically significant in models C and D. This result is in line with the findings of Sharma and Bhattarai (2013) in their Nepal study. Foreign aid, a contentious issue in economic development studies is not a statistically significant variable in the economic growth of Nigeria, whereas Sharma and Bhattarai find foreign aid to be a statistically significant variable in the economic growth of Nepal. Of the policy variables (TOPN, MP and FP) only the coefficient of the MP variable was statistically significant and negative as expected. This implies that low inflation, a by-product of sound monetary policy, is good for economic growth whereas high inflation resulting from weak monetary policy is inimical to economic growth. Again, this result supports the findings of Sharma and Bhattarai. The fact that fiscal policy is not statistically significant may be due to poor proxy choice. Our results regarding trade openness corroborates the findings of Sarkar (2008) and Sharma and Battarai (2013) who find that there is no statistically significant long-term relationship between trade openness and economic growth. This result is however perplexing given the recent worldwide acceptance that trade is a proven avenue to economic growth following the experience of East Asian countries such as Japan, South Korea and Taiwan.

As models A, B, C, and D in Table 2 show, aid is not growth enhancing regardless of policy variables. However, aid approaches marginal significance (at the 0.10 level) in the absence of policy variables (see model A), suggesting that domestic policies may be detrimental to aid effectiveness. For instance, the coefficient of the aid variable decreases steadily as different policy variables are introduced to the regressions (see models B, C, and D). A simple suggestion from this state of affairs may be that economic policies of aid recipients are contributing to the ineffectiveness of foreign aid. This is a mere suggestion since regression results reveal otherwise.

Table 3 introduces interaction terms to the models utilized in Table 2. These interactions are introduced to investigate if aid effectiveness is contingent upon good policies. In other words, the interaction terms seek to find if the effectiveness of aid is influenced by monetary policy, fiscal policy, and trade policy. As Table 3 clearly demonstrates, the effectiveness of aid on economic growth is not influenced by the prevailing policy environment.

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Table 2. Dependent Variable: Real GDP Growth Rate

Regressor(s)	Model A	Model B	Model C	Model D
AID	8.527341 (1.77)*	8.233564 (1.68)	5.132156 (1.27)	4.95986 (1.21)
SAV	-0.000185 (-0.05)	0.0005166 (0.14)	-0.0013084 (-0.42)	-0.0014127 (-0.45)
LAB	0.0061028 (1.62)	0.0033054 (0.56)	0.0121352 (2.30)**	0.0122898 (2.30)**
TOPN		0.0020982 (0.62)	-0.0019454 (-0.67)	-0.0013183 (-0.41)
MP			-0.0063072 (-3.89)***	-0.0059301 (-3.31)***
FP				0.004773 (0.53)
Constant	-0.444166 (-2.16)	-0.4248568 (-2.02)	-0.4869627 (-2.86)	-0.5653976 (-2.50)
F-Test	2.37	1.84	5.28	4.32
Adjusted R^2	0.1207	0.1002	0.4166	0.3994
Multicollinearity (VIF)	1.0600	1.8200	1.9100	2.0200
Heteroskedasticity	0.3439	0.3960	0.5008	0.9894
Durbin-Watson statistic	1.5496	1.7112	1.9324	1.9366
Alternate DW (prob > F)	0.2279	0.4022	0.8986	0.9140
Number of Observations	31	31	31	31

*statistically significant at the 10% level, **statistically significant at the 5% level, ***statistically significant at the 1% level

The models run in Tables 2 and 3 were deliberately chosen in an attempt to replicate the models applied by Feeny (2005) in Papua New Guinea and Sharma and Bhattarai (2013) in Nepal. The aim is to ascertain if the results of these studies would be replicated in Nigeria, especially as they pertain to foreign aid. Not surprisingly, divergent results are observed in these three countries with respect to foreign aid. In the Nepal case, aid was effective in the presence of sound monetary and fiscal policies. In essence, this result is confirming that policy (governance) matters in the effectiveness of foreign aid. Furthermore, a policy of "openness" does not impact the effectiveness of foreign aid in Nepal. In Papua New Guinea on the other hand, empirical results do not provide support for the contention that governance matters in aid effectiveness contrary to Nepal. However, a policy of "openness" or trade is good for economic development in Papua New Guinea. For Nigeria, while sound monetary policy was good for economic growth (see Table 2), neither "trade openness" nor fiscal policy had any statistically significant impact on economic growth. However, the coefficient of the interaction of openness and aid (TOPN*AID) in Table 3 suggests that foreign aid in the regime of trade openness may be marginally enhancing economic growth.

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Table 3. Dependent Variable: Real GDP Growth Rate

Regressor(s)	Model E	Model F	Model G
SAV	0.000205 (0.06)	0.0005132 (0.13)	-0.001195 (-0.29)
LAB	0.0061753 (1.64)	0.0062781 (1.62)	0.005675 (1.46)
TOPN*AID	0.1328167 (1.70)*	0.1642923 (1.05)	-0.1719941 (-0.51)
MP * Aid		-0.2018496 (-0.23)	0.0213096 (0.02)
FP * Aid			3.048097 (1.14)
Constant	-0.4534431 (-2.20)	-0.4624795 (-2.17)	-0.4120676 (-1.90)
F-Test	2.28	1.66	1.60
Adjusted R^2	0.1134	0.0812	0.0913
Multicollinearity (VIF)	1.04	2.69	7.94
Heteroskedasticity (prob > chi2)	0.9317	0.9627	0.5621
Durbin Watson statistic	1.5344	1.5261	1.5187
Alternate DW (prob. > F)	0.2112	0.1939	0.1873
Number of Observations	31	31	31

*statistically significant at the 10% level

Overall, Sharma and Bhattarai (2013) find foreign aid, labor participation rate, and monetary and fiscal policy to be statistically significant determinants of economic growth in Nepal. Similarly, Feeny (2005) in Papua New Guinea find that foreign aid, openness, and TREND (proxy for labor force) are statistically significant determinants of economic growth. In the case of Nigeria, empirical estimations confirm that labor force participation rate and monetary policy are statistically significant determinants of economic growth. The results here are contrary to Fasanya and Onakoya (2012) who find that aid has a statistically significant impact on economic growth in Nigeria.

The obvious question that arises is why did similar models employed in three countries yield divergent results in predicting economic growth? One explanation is that both Nepal and Papua New Guinea are very small countries compared to Nigeria. With a GDP of $19.29 billion and $15.29 billion (2013 Current US$) respectively for Nepal and Papua New Guinea, a foreign aid infusion of $1 billion is easily the equivalent of more than 5% of the GDP. In the case of Nigeria with a GDP of $521.8 billion, a $1 billion infusion of foreign aid is just 0.0019 (0.2%) of GDP. Besides, huge economies such as Nigeria and mature and stable economies in the West such as the USA and Canada will not easily show noticeable changes in growth rates of annual real GDP as opposed to small economies where minimal infusion of resources can have a profound impact on annual real GDP growth rates. Another explanation as to why similar models employed in three countries would yield divergent results in predicting economic growth is that other factors that impact economic growth such as institutions, culture, corruption, and leadership vary considerably across countries. Most importantly, the level and effectiveness of institutions that impact economic development initiatives vary drastically across countries. Hence, the regression models applied in

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Nepal and Papua New Guinea may not be appropriate for measuring the impact of inputs on GDP in the case of Nigeria. It is therefore not surprising that the same growth model would yield different outcomes in different countries.

Levine and Renelt (1992) support these explanations above when they make the case that there is no widely accepted structural model of economic growth. Furthermore, no structural model can claim to have included all the relevant variables that impact long-term growth in any country. Levine and Renelt state that "over 50 variables have been found to be significantly correlated with growth in at least one regression." Therefore, no structural model can claim to be the ideal or standard model for econometric analysis.

Since the results of the models in Tables 2 and 3 do not seem to be able to explain the growth rate of real GDP in Nigeria as they did in the case of Nepal and Papua New Guinea, it is necessary to try other structural models as Levine and Renelt (1992) alluded to. Therefore the model in Table 2 will be run again but with an additional independent variable - foreign direct investment (FDI) as a percentage of RGDP. The inclusion of FDI is warranted because lately Nigeria is the preferred destination for FDI in Sub-Saharan Africa, receiving net inflows of $9 billion and $7 billion in 2011 and 2012 respectively (World Bank 2015). It is therefore appropriate to investigate the impact of FDI on economic growth. Table 4 presents the results of regression models incorporating FDI.

From Table 4, the coefficient of FDI is positive as expected and statistically significant at the 10% level of significance in models H and I. Interestingly, the strength of the impact of FDI deteriorates steadily from model H to K. In other words, as policy variables are added to the models, the impact of FDI on economic growth weakens. This may suggest that the policy environment in Nigeria is stifling the impact of FDI. It is also possible that FDI is not having the expected impact because it is concentrated mainly in two extractive industries of oil drilling and mining. Hence, the spillover effect on other sectors of the economy is severely limited. The impact of the labor force participation rate (LAB) remains statistically significant in model J as observed in Table 2. Similarly, the impact of monetary policy (MP) seems to be exactly as observed in Table 2. Therefore, it appears that the statistically significant variables accounting for economic growth in Nigeria are labor force participation rate, monetary policy, and foreign direct investment.

The preceding analysis confirms that structural economic growth models that seem to account for economic growth in some countries may not be applicable to all countries and situations as the comparisons between very small countries (Nepal and Papua New Guinea) and a huge country (Nigeria) show. Therefore the conclusion reached by Levine and Renelt (1992) is supported by our analysis.

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Table 4. Dependent Variable: Real GDP Growth Rate

Regressor(s)	Model H	Model I	Model J	Model K
FDI	0.0997532 (1.97)*	0.0977815 (1.90)*	0.0463208 (1.00)	0.0542995 (0.84)
ODA Aid	0.0356422 (0.71)	0.0360018 (0.71)	0.0275636 (0.64)	0.0252482 (0.55)
LAB	0.003474 (0.92)	0.0015427 (0.28)	0.0099231 (1.89)**	0.0095855 (1.69)
TOPN		0.0014925 (0.49)	-0.0014627 (-0.54)	-0.0017472 (-0.55)
MP			-0.0056434 (-3.39)***	-0.0057247 (-3.26)***
FP				-0.0021863 (-0.18)
Constant	-0.3629494 (-1.94)	-0.3419708 (-1.76)	-0.4615594 (-2.75)	-0.4173056 (-1.40)
F-Test	3.98	2.96	5.62	4.51
Adjusted R^2	0.2298	0.2076	0.4350	0.4122
Multicollinearity (VIF)	1.36	1.92	2.05	2.76
Heteroskedasticity (Prob>chi2)	0.5789	0.4865	0.4687	0.4805
Durbin Watson statistic	1.8006	1.9305	2.0277	2.0469
Alternate DW (prob > F)	0.6139	0.8553	0.8980	0.8410
Number of Observations	31	31	31	31

*statistically significant at the 10% level, **statistically significant at the 5% level, ***statistically significant at the 1% level

5. Summary and Conclusions

The use of cross-country studies to investigate the impact of foreign aid and other variables on the economic growth of LDCs has succeeded in raising more questions or controversies than answers. Consequently, the quest to isolate the variables that can be applied across board to boost economic growth in LDCs remains in the wilderness. This state of affairs notwithstanding, development economists continue to march on in search of lessons that have wide applicability. This tenacity to unearth the secrets of economic growth has led to a shift from cross-country studies to individual country studies or case studies.

This study therefore adds to this new wave of inquiry by focusing on Nigeria which is arguably the most important or strategic country in SSA. Using data covering 1981 – 2011, empirical estimations show that foreign aid does not have a statistically significant impact on economic growth in Nigeria, contrary to the findings of Fasanya and Onakoya (2012). However, the labor participation rate, monetary policy, and foreign direct investment appear to be the variables impacting economic growth in Nigeria. Therefore, for Nigeria, domestic policy environment matters in economic growth as monetary policy demonstrates in this study.

One lesson from this study is that it further confirms the widely held notion that cross-country studies are not the way to go in evaluating determinants of economic growth in general

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and aid effectiveness in particular. In other words, there is no "one size fits all" solution in economic growth issues in LDCs as Levine and Renelt (1992) alluded to earlier. Beyond the normal inputs in a neo-classical growth model, there are other variables that impact economic growth initiatives such as institutions, culture, and leadership which vary considerably across countries and jurisdictions. Finally, it is hoped that the effort here will provide the impetus for more individual country studies or case studies as an avenue to further unlock the mysteries of economic growth.

Obviously, this study has some limitations. First, the proxies chosen for the policy variables may not fully capture the impact of these variables. In addition, it is quite possible, given the reported adjusted R^2 values, that there is the problem of omitted variables such as culture and ethnic diversity that are not easily quantified, but nonetheless impact economic growth. Future studies need to improve on these issues.

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