

Implications of Capital Inflows for Monetary Policy in Sub-Saharan African Countries

Innocent C. Nzeh, Gabriel O. Ebenyi & Chukwuka C. Ekechi

Abstract

In this paper, we investigate the relationship between capital inflows and monetary policy in Sub-Saharan Africa. Using annual data and under the framework of Dynamic Generalized Method of Moments (GMM), the study found that, on the aggregate, FDI, FPI and remittances are positively related to money supply. The study also found that ODA, FDI and remittances influence monetary expansion indirectly via monetary and fiscal policies. Results also show that in resource-rich, resource-poor and land-locked countries, capital inflows influence money supply by indirectly increasing the broad money in the economy M1 and also increase government expenditure through fiscal expansion. In view of the above observed relationship between capital inflows and monetary policy in Sub-Saharan Africa, we suggest that in periods of high capital inflows, expansionary monetary policy should be avoided. The purpose of this paper is to critically analyze the relationship between capital inflows and monetary policy in SSA.

Keywords: Capital inflows, Generalized Method of Moments, Resource-rich, Resource-poor, Monetary Policy

Introduction

Capital inflows can positively influence households' welfare as it helps improve their consumption over time. It can also help countries achieve a better international diversification of their portfolios. However, large and abrupt inflows of capital with a short term investment horizon have negative macroeconomic effects, such as rapid monetary expansion, inflationary pressures, real exchange rate appreciation and widening current account deficits. This position is supported by Doojav (2008) who noted that even though large capital inflows had financed a higher economic growth in Mongolia, this has created pressures that led to inflation, real exchange rate appreciation and a reduction in the domestic interest rate.

The relaxation of impediments to capital mobility across countries owing to liberalization of financial market and capital account with its attendant integration of domestic economies to world economy has led to massive inflow of capital to countries. According to Lartey (2008), more recent years have witnessed the integration of poor developing countries into the global economy accompanied by a surge in private capital inflows into these economies. This recent wave of private capital inflows, according to the study, could potentially lead to the realization of the Dutch disease in poor developing countries, and, therefore, expose them to policy challenges similar to those that confronted middle income countries in the 1990s with respect to reconciling international capital mobility and domestic macroeconomic stability.

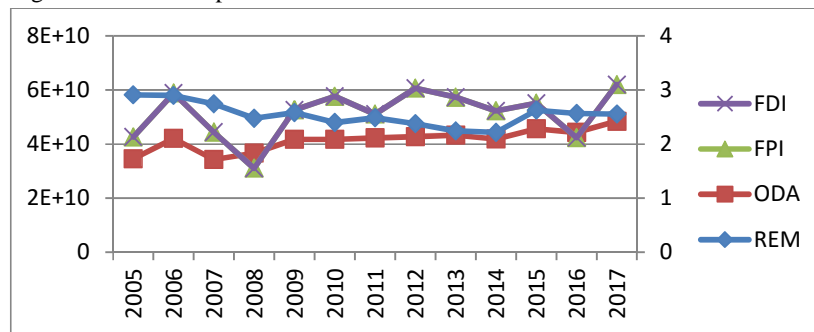
Sub-Saharan African countries (henceforth called SSA) are not left out in this upsurge in capital inflows, even though capital inflows in this sub-region are a recent phenomenon. Calvo and Reinhart (1998) maintained that throughout most of the 1980s and 1990s, capital flows to SSA countries were dominated by official transfers, as foreign private capital shied away. Furthermore, with the exception of South Africa, portfolio flows to SSA, which was one of the fastest growing sources of capital for emerging market economies in the 1990s, have been negligible. According to the study, by 1992 there were signs that a few African countries, notably Kenya and Uganda, had begun to attract private capital inflows and, following the 1994 elections, South Africa joined the ranks of capital importers. By 1996, Nigeria and Zimbabwe began to attract the attention of foreign investors. Recently, however, there is a surge in sources of capital inflows in SSA countries as fig. 1 below shows.

In another respect, growth in monetary expansion as measured by annual percentage of broad money supply has been fluctuating within this sub-region over the years. Data from World Development Indicators (WDI, 2018) show that annual percentage of broad money supply range from 10.39%, 7.37%, 4.1%, 5.65% and 6.42% from 2009 through 2017 for Republic of South Africa, Kenya, Uganda, Nigeria and Zimbabwe respectively.

Just as has been stated above, capital inflows have their shortcomings, if not well managed. Lee (1997) contended that surging capital inflows can be something of a double-edged sword that cut both ways and hence has destabilizing effects on the economies of these countries including a tendency for the local currency to appreciate, undermining the competitiveness of export industries, and potentially giving rise to inflation. The study maintained that capital inflows result in a buildup of foreign exchange reserves. As these reserves are used to buy domestic currency, the domestic monetary base expands without a corresponding increase in production; hence too much money begins to chase too few goods and services. With rising money supply, interest rate is expected to fall and this poses difficulty to monetary authorities in their urge to maintain price stability.

Based on the foregoing analysis of the link between capital inflows and monetary policy, this study re-examines the relationship between capital inflows and monetary policy in Sub-Saharan Africa in order to unravel the weak linkage between the two variables as well as to disconnect between the theory and empirical evidence by using the method of Generalized Method of Moments (GMM) which is the more appropriate method for analyzing panel data instead of other methods employed by other researchers in a similar study. The study is apt considering that while capital inflows keep increasing in SSA countries, data on broad money supply show fluctuating trend over the years as evidenced by Fig. 1 below. This study is paramount as identifying the link has implications for effective monetary policy implementation.

Fig. 1 Sources of Capital Inflows in Sub-Saharan African Countries



Source: Compiled by the researcher with data from WDI (2017)

Empirical Literature

Bond (1998), cited in Nwokoye & Oniore (2017), examined impact of monetary policy on capital flows in two Asia countries of Indonesia and Thailand. The study regress capital flows measured by financial accounts plus errors and omissions on interest rates, net domestic assets of the Central bank and real domestic output using ordinary least squares and the two stage least squares methods of analysis. Empirical results showed that tight monetary policy was an important source of inflows to Indonesia and Thailand in recent years, and that the independence of monetary policy decreased during the inflow period.

Cavoli and Rajan (2005), cited in Nwokoye & Oniore (2017), examined capital inflows problem in selected Asian economies in the 1990s: the role of monetary sterilization. The study employed data on net foreign assets, interest rates, prices, output, exchange rate and money supply using ordinary least squares and granger causality tests. The study developed a simple model to examine the reasons behind the capital inflow surges into selected Asian economies in the 1990s prior to the financial crisis of 1997–98. The analytical model showed that persistent

uncovered interest differentials and consequent capital inflows may be a result of complete monetary sterilization, perfect capital mobility, sluggish response of interest rates to domestic monetary disequilibrium, or some combination of all three. Using the model as an organizing framework, the paper undertakes a series of related simple empirical tests of the dynamic links between international capital flows, the extent to which they are sterilized and uncovered interest rate differentials in the five crisis-hit economies (Indonesia, Korea, Malaysia, the Philippines and Thailand) over the period 1990:1–1997:5.

From the perspective of institutions, Alfaro, Kalemli-Ozcan and Volosovych (2005) find that institutional quality is an important determinant of capital flows. Accordingly, historical determinants of institutional quality have a direct effect on today's foreign investment.

The role of aid as an aspect of capital inflow was investigated in Mwabutwa, Viegli and Bittencourt (2011). Using the Bayesian dynamic stochastic general equilibrium (DSGE) model to account for the short-run monetary policy response to increased aid inflows in Malawi, the study reveals that the impact of aid inflows on depreciation and inflation are much smaller when monetary authorities indulge in money targeting other than following the Taylor rule and incomplete sterilization. However, Jain-Chandra and Borsa (2014) in their study of capital flows concentrated on the link between interest rates and global factors. The study found that monetary transmission mechanism, though effective, is somewhat weaker in Asia during the periods of surges in capital inflows. Using structural vector autoregression for Korea, Kim (2014) found that a contractionary monetary policy shock, which increases the interest rate, appreciates the Korean won significantly in the short run as predicted by most theories. Secondly, contractionary monetary policy shocks increase capital inflows into the bond market.

In a study in Nigeria, Okpanachi (2013) employed a simple analytical framework to estimate the effectiveness of monetary sterilization by the Central Bank of Nigeria (CBN) in response to increased capital inflows. The study finds evidence of less-than-full, but significantly high sterilization intensity as well as evidence of slacking sterilization over time. In EU members, study by Ketenci (2015) indicates that the level of capital mobility increased during the global financial crisis, 2007-2013. The study concludes that decrease in investments and increase in the international capital mobility level of European countries during the period of the global financial crisis of 2007-2013 indicates a reallocation of capital from international to regional markets. Olani (2016) based their study of monetary policy on gross foreign direct and portfolio investment inflows to emerging economies. Findings show that gross foreign direct inflows respond slowly to shocks in monetary policy while gross portfolio reacts on impact.

Having gone through the literature, we have observed that in all the works reviewed, no one decomposed the Sub-Saharan African countries into their resource endowments and other factors such as whether the countries are land-locked or not. It is obvious that the implication of inflows on monetary policy management varies on grounds of the resource endowments of the individual countries. For instance, in resource-rich countries, a rise in international price of any of the resources they are endowed with could affect monetary policy management if this coincides with a period of rising inflows from other diverse sources. By grouping the countries into resource-rich, resource-poor and landlocked countries, we have been able to investigate how capital inflows impact each group's monetary policy management. Therefore, this study contributes to knowledge by grouping the countries accordingly and investigating how inflows affect the monetary policy management of each group. Another area the study contributes to knowledge is by introducing the interaction effect between monetary policy and sources of inflows and between fiscal policy and sources of inflows. With this, we have been able to investigate the effect on money supply as a result of these interactions which is aimed at guiding policy makers on the best policy to adopt regarding the nature of inflow from any of the sources.

Theoretical Framework

The theoretical framework that guided this work is based on the interaction among capital flows, money supply and asset prices. It is obvious that asset prices are influenced by capital flows as external factors and they also influence money supply as a domestic factor. Caballero and Krishnamurthy (2006) provided theoretical insights with regard to the impacts of capital flows on asset prices as well as the link between capital inflows and asset bubbles. The study argued that emerging market economies provide a conducive macroeconomic atmosphere for the emergence of asset bubbles dynamics. It was the contention of the study that a shortage of stores of value, i.e. dynamic inefficiency which is caused by financial repression in their financial systems tends to create a space for bubbles on unproductive assets to arise.

In their study, Kim and Yang (2009) and Taguchi, Sahoo and Nataraj (2005) described two kinds of channels in which asset prices are affected by capital flows. One of such channel is that capital flows can directly affect the demand for assets, which can thus influence asset prices. For instance, capital inflows directed to the stock market increases the demand for stocks and by extension causes the stock price to rise. The second channel is an indirect one through a change in money supply. The workability of this channel depends on the degree of monetary autonomy in countries facing capital flows. Any monetary authority with full autonomy can independently manage money supply from any capital flows.

Methods and Procedure

Consider the linear regression model of the GMM

$$MS_{it} = \delta_1 MS_{it-1} + S_1 CI_{it} + S_2 CV_{it} + \eta_t + v_{it} \dots \dots \dots (1)$$

where *i* is country index, *t* is time index, δ and *S* are the parameters to be estimated, MS is money supply, CI comprises variables for capital inflows and CV is a vector of other control variables that affect money supply. η_t is unobserved country-specific effect term, and v_{it} is the usual error term.

Methodology

By lagging money supply in equation 1, this leads to dynamic panel bias due to the correlation between the MS_{it-1} and disturbance term, μ_t . In other words; MS_{it} is a function of μ_t as μ_t is time-invariant. Hence MS_{it-1} is also a function of μ_t , meaning that Eq. 1 has a severe endogeneity problem that happens when the lag of dependent variable, as one of the regressors, is correlated with one component of the error term. Moreover, in Eq.1, the fixed effects or time-invariant country characteristics (μ_t), might be correlated with the explanatory variables which violate the assumptions underlying the classical linear regression model. Consequently, the simple ordinary least squares (OLS) or fixed and random effects approaches can produce highly misleading results.

This study utilizes the generalized method of moments (GMM) panel estimator which was first suggested by Anderson and Hsiao (1981) and later developed further by Arellano and Bond (1991). The dynamic GMM procedure is as follow: first, to eliminate the individual effect from dynamic model, the method takes differences. Then, it instruments the regressors by using their lagged values. Finally, as a last step the inconsistency arising from the endogeneity of the explanatory variables is eliminated. The consistency of the GMM estimator depends on two specification tests. The first is a Sargan test of over-identifying restrictions, which tests the overall validity of the instruments. Failure to reject this null hypothesis means that the instruments are valid. The second test examines the null hypothesis that the error term is not serially correlated. If the null hypothesis cannot be rejected, it provides the evidence that there is no second-order serial correlation and the GMM estimator is consistent. The maximum lags length of independent variable which used as instrument is 2. To select the optimal lag, the AR(1) and AR(2) statistics are employed. In addition to this, due to the small sample size, this paper applied one-step estimators which uses weighting matrices that are independent of estimated parameter. In the specification, year dummies are used as instrument variable because other regressors are not strictly exogenous.

Data and Empirical Strategy

Eq. (1) is estimated using the GMM estimator based on a panel of 27 Sub-Saharan African countries. Appendix 1 lists the countries in the sample. The choice of countries selected for this study is influenced by availability of data over the sample period. The panel covers the period 2005–2016 and is unbalanced. In order to maximize sample size and to identify the parameters of interest more precisely, annual data is used. The dependent variable in our sample is money supply measured as annual percentage of broad money supply. The explanatory variables are foreign direct investment (FDI), foreign portfolio investment (FPI), remittances and official development assistance (ODA) all which are sources of capital inflows. Other variables that served as control variables are nominal exchange rate, annual inflation rate, government expenditure, prime lending rate and gross domestic product (GDP). All the data are sourced from World Development Indicators (WDI).

Three approaches were applied to capture the effects of capital inflows on money supply in Sub Saharan African countries. The first is Eq. 1 which estimates the effect of capital inflows on money supply in all the countries. In the second approach, the study examined the impact of capital inflows on money supply by grouping the countries into resource-rich, resource-poor and land-locked SSA countries. The grouping is done by a study carried out by the Economic Commission for Africa (2011) that grouped the SSA countries accordingly. The third approach is to examine whether the effect of capital inflows on money supply also depends on complementary policies in the form of fiscal policy and monetary policy. Using government expenditure to proxy for fiscal policy and prime lending rate to proxy for monetary policy, the interaction of these policy variables with the individual source of capital inflows were tested.

Findings and Discussion

This section presents the empirical results of three approaches, based on the GMM -dynamic panel data in tables 1–4. In table 1 below, results of the entire SSA countries are presented. Findings show that foreign direct investment (FDI), portfolio investment (FPI) and remittances are significant and they are positively related to money supply. Of the three sources, remittances has the highest impact on money supply. These results have shown the paramount place of remittances as a major source of foreign exchange revenue in these countries as well as the gradual development of the capital market. The study also found government expenditure to be significant in influencing money supply and this shows the sensitivity of expansionary fiscal policy in influencing money supply in developing countries. The results also show that money supply increases when monetary policy interacts with FDI, ODA and remittances. Money supply also increased with the interaction of fiscal policy and FDI, ODA and remittances.

Table 2 displays the result of effect of capital inflows on money supply in resource-rich SSA countries. In these countries, findings show that ODA foreign portfolio investment, inflation and government expenditure are significant and positively related to money supply. The effect of FPI on money supply is an evidence of the level of capital market development in these countries. Also results show a significant positive link between capital inflows and money supply when fiscal policy interacts with ODA, FDI and remittances. On the other hand, the interaction of monetary policy, ODA and remittances is significant and positive.

The results of the impact of capital inflows on money supply are displayed in table 3. It is found that only FDI is significant and positive. While there is no evidence of a significant result when fiscal policy interacts with any of the sources of capital inflow, monetary policy interaction with FPI is significant. This result shows that increasing interest rate encourages foreign portfolio investment and hence, rising money supply. In table 4, the result of the effect of capital inflows on money supply in land-locked SSA countries is displayed. Except FPI that has a negative influence on money supply, all other sources of capital inflows are significant and positively related to money supply. It is also shown that interest rate is negatively related to money supply. The interaction of monetary policy and capital inflows shows that only remittances is significant. However, the interaction of fiscal policy with ODA and remittances are significant and positively related to money supply.

Limitations of the Study

A major limitation we found in the study is the paucity of data in most of the variables for the individual countries. This has prompted us to limit the scope of the study to 2016 which is the year that has adequate data for all the variables in the study and for all the countries in the World Development Index (WDI)

Policy Implications, Conclusion and Recommendations

Using a dynamic systems model to estimate the impact of capital inflows on money supply in SSA countries, the study as displayed in table 1 found that on the aggregate, FDI, FPI and remittances influence money supply positively. Findings also show that apart from directly influencing money supply, ODA, FDI and remittances increase monetary expansion indirectly via monetary and fiscal policies. The results differ when the SSA countries are grouped with resource-rich countries showing that ODA, FPI and government expenditure have positive influence on monetary expansion. However, monetary policy interactions with ODA and remittances show positive link with money supply just as fiscal policy interaction with ODA, FDI and remittances influence money supply positively. For resource-poor countries, only FDI has positive impact on money supply while interaction between fiscal policy and FPI significantly increase money supply. In land-locked countries, ODA, FPI and remittances influence money supply positively. In another vein, while the interaction of monetary policy with remittances increase money supply, the interaction of fiscal policy with ODA and remittances increase money supply. The study therefore concludes that capital inflows influence money supply in SSA countries.

These results no doubt have wider implications for Sub-Saharan African countries that rely heavily on these inflows to argument domestic resources. Increased money supply owing to capital inflows assist in the development of the local economy, however, if not channeled properly, it has the implication of putting pressure on monetary authorities in their effort to stabilize domestic prices. With excess liquidity arising from capital inflows, using sterilization policy to control money supply is not always easy as bank vaults are awash with cash. The situation is worsened by the penchant of these countries to engage in expansionary fiscal policy. Also, increasing interest rate to stem inflationary pressure encourages more capital inflows as foreign investors take advantage of such opportunity as can be shown by the results of the study. The study therefore recommends that in periods of high capital inflows, expansionary fiscal policy should be avoided while attractive investment outlets that contribute meaningfully to growth should be developed. With such, foreign investments and Diaspora remittances can have profitable outlets to be channeled and this can reduce excess liquidity in the banking system orchestrated by capital inflows.

References

- Alfaro, L., Kalemli-Ozcan, S & Volosovych, V. (2005). Capital Flows in a Globalized World: The Role of Policies and Institutions. A paper Prepared for the NBER Conference on International Capital Flows.
- Anderson, T. & Hsiao, C. (1981). Estimation of dynamic models with error components. *Journal of the American Statistical Society*, New York D.C. 76, 598–606.
- Arellano, M. & Bond, S. (1991). Some Tests of Specification for panel data: Monte Carlo evidence and an application to employment equations. *The Review of Economic Studies*, 58, 277–297.
- Blanchard, O., Ostry, Ghosh, A. & Chamon, M. (2015). Are capital inflows expansionary or contractionary? Theory, policy implications, and some evidence. IMF Working Paper series, New York USA
- Caballero, R. & Krishnamurthy, A. (2006). Bubbles and capital flow volatility: Causes and risk management. *Journal of Monetary Economics*, 53, 35–53
- Calvo, G. A. & Reinhart, C. M. (1998). The consequences and management of capital inflows: Lessons for Sub-Saharan Africa. Retrieved from <http://www.bistandsdebatten.se/wp-content/uploads/20/11/2019/International-Capital-Flows.pdf>
- Doojav, G. (2008), Capita flows and their implication for central bank policies: the case of Mongolia. A paper written for research studies series of the South East Asian Central Banks (SEACEN) Research and Training Centre.

- Economic Commission for Africa Policy Research Paper (2011). Industrial Policies for the Structural Transformation of African Economies: Options and Best Practices
- Jain-Chandra, S & Unsal, D. F. (2014). The effectiveness of monetary policy transmission under capital inflows: Evidence from Asia. *Borsa Istanbul Review* 14 (2014) 96-103
- Ketenci, N. (2015). Capital mobility in the panel GMM framework: Evidence from EU members. *The European Journal of Comparative Economics*, 12(1), 3-19.
- Kim, S. (2014). Effects of monetary policy shocks on the exchange rate in the Republic of Korea: Capital flows in stock and bond markets. *Asian Development Review*, 31(1), 121–135.
- Kim, S., & Yang, D.Y. (2011). The impact of capital inflows on asset prices in emerging Asian economies: is too much money chasing too little good? *Open Economies Review*, 22, 2, 293–15.
- Lee, J. (1997). Sterilizing Capital Inflows. *International Monetary Fund. Economic Issue* 7
- Mwabuswa, C. & Bittencourt, M. (2012). *Monetary Policy Response to Capital Inflows in Form of Foreign Aid in Malawi*. University of Pretoria Department of Economics Working Paper Series
- Nwokoye, E.S. & Oniore, J.O. (2017). Impact of Monetary Policy on Capital Inflows in Nigeria. *Business, Management and Economics Research*. Vol. 3, No. 10, pp: 192-200, 2017
- Okpanachi, U. M. (2013). An assessment of monetary policy response to capital inflows in Nigeria. *CBN Journal of Applied Statistics*, 3(2 75).
- Olani, A. (2016). *Transmission of monetary policy through capital inflows to emerging markets*. Queen's Economics Department Working Paper No. 1358.
- Taguchi, H. Sahoo, P. & Nataraj, G. (2015). Capital flows and asset prices: Empirical evidence from emerging and developing economies. *International Economics*, 141, 1-14.

Table 1 Effect of capital inflows on money supply in SSA countries

Variables	Coefficient	t-stat	p-value
Money Supply	0.9	1.64	0.1009
FDI	6.7	3.7	0.0002
FPI	2.8	2.7	0.0063
REM	9.6	2.1	0.0345
GOV	1.13	2.3	0.0215
Sargan Test			0.93
1st order serial correlation			0.1384
2nd order serial correlation			0.724
Monetary Policy Interaction			
MS(-1)	0.52	2.3	0.0179
INTR*FDI	1.65	2.2	0.0287
INTR*REM	7.4	2.5	0.0323
INTR*ODA	4.3	2.9	0.0039
Sargan Test			0.784
1st order serial correlation			0.0187
2nd order serial correlation			0.7987
Fiscal Policy Interaction			
MS(-1)	0.09	0.9	0.3881
GOV*FDI	1.47	1.6	0.0915

Table 2 Effect of capital inflows on money supply in SSA Resource-rich countries

Variables	Coefficient	t-stat	p-value
Money Supply	0.42	0.4	0.6843
FPI	8.3	2.05	0.0451
ODA	3.51	0.86	0.06
GOV	0.391	0.67	0.0993
Sargan Test			0.2768
1st order serial correlation			0.4851
2nd order serial correlation			0.7083
Monetary Policy Interaction			
MS(-1)	1.27	0.85	0.3961
INTR*REM	2.62	0.28	0.026
INTR*ODA	2.42	2	0.0496
Sargan Test			0.9523
1st order serial correlation			0.55
2nd order serial correlation			0.5798
Fiscal Policy Interaction			
MS(-1)	0.11	0.27	0.7823
GOV*FDI	3.5	5.33	0
GOV*REM	3.28	2.7	0.009
GOV*ODA	3.4	2.27	0.0266
Sargan Test			0.9587
1st order serial correlation			0.2556
2nd order serial correlation			0.7709

Table 3 Effect of capital inflows on money supply in SSA Resource-poor countries

Variables	Coefficient	t-stat	p-value
Money Supply	0.21	1.33	0.1847
FDI	9.2	1.96	0.0523
Sargan Test			0.55
1st order serial correlation			0.0894
2nd order serial correlation			0.1124
Monetary Policy Interaction			
MS(-1)	0.6	3.2	0.0018
GOV*FPI	9.7	1.7	0.082
Sargan Test			0.8204
1st order serial correlation			0.2803
2nd order serial correlation			0.285

Table 4 Effect of capital inflows on money supply in Land-locked SSA countries

Variables	Coefficient	t-stat	p-value
Money Supply	-0.4	-3.2	0.0022
FDI	-8.9	-2.2	0.0276
ODA	2.1	1.9	0.0629
REM	3.8	5.5	0
GDP	4	4.8	0
INTR	-3.4	-2.1	0.0404
Sargan Test			0.7217
1st order serial correlation			0.1224
2nd order serial correlation			0.4858
Monetary Policy Interaction			
MS(-1)	1.15	2.1	0.0369
INTR*REM	3.4	2.4	0.016
Sargan Test			0.8599
1st order serial correlation			0.6847
2nd order serial correlation			0.3079
Fiscal Policy Interaction			
MS(-1)	0.313	0.64	0.0006
GOV*ODA	1.2	2.1	0.0358
GOV*REM	9.4	2.9	0.0043
Sargan Test			0.4788
1st order serial correlation			0.0329
2nd order serial correlation			0.5347

Appendix 1 SSA Countries Included in the Study

Resource-Rich Countries	Resource-Poor Countries	Land-Locked Countries
Botswana	Cape Verde	Burkina Faso
Congo Democratic	Cote Di' voire	Burundi
Sierra Leone	Gambia	Lesotho
South Africa	Guinea Bissau	Malawi
Mauritania	Kenya	Mali
Nigeria	Liberia	Niger
Zambia	Mozambique	Uganda
	Namibia	
	Rwanda	
	Senegal	
	Tanzania	
	Togo	

Source: Adapted from a study by ECA (2011)

Note: The grouping is done on the basis that more (less) than 10% of the country's GDP comes from the primary commodity value added.

NB: Most closely related sub-theme: Effective public policies (financial, monetary and fiscal) for structural transformation in Africa

Innocent C. Nzehis of the Department of Economics, Renaissance University, Ugbawka, Enugu State nzechile@yahoo.com, 08034222084
 Gabriel O. Ebenyi is of the Department of Economics, Renaissance University, Ugbawka, Enugu State, Nigeria, ebenyigabriel@yahoo.com, 08060003200

Chukwuka C. Ekechi is of the Department of Economics, Renaissance University, Ugbawka, Enugu State, Nigeria, ekechichuks@gmail.com, 08034976395