Institutional benchmarking of foreign aid effectiveness in Africa

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Abstract

This paper integrates two main strands of the aid-development nexus in providing additional information as to why institutional benchmarks (thresholds) matter for the effectiveness of aid in institutional development. Using seven government-quality dynamics (rule of law, regulation quality, government-effectiveness, political-stability, voice & accountability, corruption-control and democracy), we provide a thorough assessment of the aid-development nexus when existing institutional development levels matter. Results which are consistent across specifications and conditional distributions of institutional variables have three broad implications (with respect to three tested hypotheses). (1) Institutional benefits of foreign-aid are contingent on existing institutional levels in Africa. (2) But for a thin exception, foreign-aid is instrumental in institutional development for countries with low levels of institutional quality. (3) Institutional quality benefits of development assistance are questionable in countries with high levels of institutional development. As a policy implication, blanket policies based on the aid-development nexus are unlikely to be appropriate; therefore policy measures should be contingent on prevailing levels of institutional development and tailored differently across best and worst countries in terms of institutional development.

1. Introduction

For more than half a century, the political economy of foreign-aid has been widely debated in academic and policy-making circles. A substantial literature on institutions and development suggests that Africa is poor because it is deficient of good institutions: dictatorships, lack of property rights, weak courts and contract-enforcement, political instability, high corruption, violence and hostile regulatory environment for private business. With respect to this strand, in order to end African poverty, the West needs to promote good institutions (Easterly, 2005a). In response to how foreign-aid might promote good institutions in aid-recipient countries, much literature has focused on how institutions matter in the effectiveness of foreign-aid (Alesina & Dollar, 2000; Alesina & Weder, 2002; Knack, 2001; Dixit, 2004; Djankov et al., 2005; Asongu, 2012ab).

From the interesting literature on aid and institutions, the debate has centered around three main questions. Firstly, do donors allocate more to poor countries who have better institutions (e.g less corruption, more democracy)? Secondly, does foreign-aid induce better or worse institutional quality? Thirdly, how would outsiders engineer a transition from the present state of informal institutions towards more formal institutional settings through foreign-aid? The first strand of the debate is relevant because donors have widely assumed that aid would be more effective in countries with better institutions. More so the answer to the first concern also affects the response to the second. Implying, if donors give more aid to countries with better institutions, this would create an incentive for reformers in the recipient country to adapt to institutions. Much of the literature has found no evidence that democracies or less corrupt states are rewarded with more aid (Alesina & Dollar, 2000; Alesina & Weder, 2002). On the second question, a great chunk of the literature has pointed to the institutional (Knack, 2001; Asongu, 2012a) and

democratic (Djankov et al., 2005) perils of foreign-aid, especially in ethnically fractionalized states (Svensson, 2000). Lastly, there is the thorny third question (strand) about how aid would practically go about changing institutions in the interest of developing recipient countries. In substance the transition from informal to formal institutions is somehow complex and attempts by Western aid agencies to introduce top-down formal institutions have not fared well in the complicated maze of bottom-up arrangements. To this third question, Dixit(2004) has presented an interesting argument as to how introducing imperfect rule-based institutions could actually make things worse, as they create outside opportunities for members of relationship-based networks[1].

This paper contributes to existing literature by integrating the last two strands highlighted above within the same empirical framework. Thus we put some empirical structure on two questions of the aid-institutions nexus in order to give policymakers guidance on the issues. In substance this work attempts to elucidate the following questions. Are the institutional benefits of development-assistance contingent on existing institutional quality (second strand)? At what institutional thresholds will foreign-aid be instrumental in improving institutional quality (third strand)? Are the institutional benefits of foreign-aid questionable until greater domestic institutional development has taken place(second and third strands)?

It has been well documented in the globalization-development literature that certain 'threshold' levels in financial and institutional development are imperative for an economy get the full indirect benefits and reduced risks of capital account globalization (Henry, 2007; Rodrik & Subramanian, 2009; Kose et al., 2011). Empirically assessing the aid-institutions nexus in the light of available weight of empirical evidence on 'threshold theories' from the openness-

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[1] Network members can then cheat on their partners and vamoose to operate in the rule-based system. A society could get caught in-between formal and informal institutional settings with neither working well.

development literature could provide relevant policy implications on the two complementary research questions highlighted above. Though not in form, yet in substance, the existing literature points to the existence of certain initial institutional threshold conditions (corruption, democracy…etc) but lacks a unifying framework that explores the most quantifiable government quality indicators currently available (rule of law, regulation quality, corruption-control, government-effectiveness, voice & accountability, political stability (or no violence) and democracy)[2].

The contribution of this paper to the literature is fivefold. Firstly, we deviate from the mainstream approach to the aid-institutions nexus that does not incorporate all dimensions of government quality and provide an exhaustive assessment with seven institutional quality dynamics. Secondly, a substantial bulk of studies in the literature is based on data collected between 1960 and 2001. By using much recent data, the paper provides an updated account of the nexus with more focused policy implications. Thirdly, owing to the debate on methodological issues in the assessment of foreign-aid effectiveness, this paper provides new dimensions to the debate by investigating the aid-development nexus when existing institutional quality dynamics matter. Thus there is the presumption here that certain institutional thresholds might be imperative in the institutional-effectiveness of foreign-aid. Fourthly, this paper integrates two of the three strands currently prevailing in the literature by putting some empirical structure on them, in order to give policymakers the much needed guidance. Thus blanket common aid policies might not be effective unless they are contingent on the prevailing strands of the debate, existing levels of 'institutional development dynamics' and tailored differently across countries with the least and most advanced institutions. Fifthly, with 2015 approaching,

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[2] This is probably because most studies are based on data collected between 1960 and 2001. Government quality indicators for developing countries were not available before 1996(See World Development Indicators: Good Governance).

it is momentous time to assess donors' objective of reaching the MDGs. In plainer terms, examining the effectiveness of development assistance on institutions in the light of the four points underlined above (in the run-up to 2015) could provide crucial policy options to donor and multilateral agencies on their assistance impact.

The rest of the paper is organized as follows. Section 2 presents existing literature on aid effectiveness. Measurement and methodology issues are discussed in Section 3. Empirical analysis is covered in Section 4. We conclude with Section 5.

2. Literature review

2.1 Conflicts in the literature

A great bulk of the literature on the effectiveness of aid has almost exclusively been oriented towards the macroeconomic impacts of aid; assessing the effects of aid on economic savings, investment and growth. The low-depth of analytical framework, heavy reliance on empirical evidence (which is often ambiguous at best) and inconclusive results with recently refined methodologies (Masud & Yontcheva, 2005), leaves the aid-development nexus widely open to debate. For the purpose of clarity, literature pertaining to the effectiveness of aid in growth (development) could be classified into two strands as summarized in Table 1: one acknowledging the negative consequences of aid and the other brandishing the positive rewards of development assistance.

The first strand includes authors advocating the case for the insignificant impact of aid on investment, savings or growth. Aid has been established to improve unproductive public consumption (Mosley et al., 1992) and stops short of increasing investment. This later point has been validated by Boone (1996) and Reichel(1995). Ghura(1995) has pointed to the negative

effect of aid on domestic savings whereas Pedersen (1996) asserts, foreign-aid distorts development and ultimately leads to aid dependency.

Table 1: Summary of conflicts in the literature

Researchers	Main findings
First-strand: Aid does not lead to growth(development)	
Mosley et al. (1992)	Aid increases unproductive public consumption and fails to promote growth.
Reichel(1995)	Aid fails to promote savings owing to the substitution effect.
Ghura(1995)	Aid negatively impacts savings.
Boone(1996)	Aid is insignificant in improving economic development for two reasons: poverty is not caused by capital shortage and it is not optimal for politicians to adjust distortionary policies when they receive aid flows.
Pedersen (1996)	Foreign Aid distorts development and leads to aid dependency.
Asongu(2012a)	Development assistance is perilous to government quality dynamics
Asongu(2012b)	Development assistance is inhumane and leads to reversed economics
Second-strand : Aid improves growth(development)	
Burnside & Dollar(2000)	Aid can be effective when policies and economic management are good.
Ghura(1995)	Aid positively impacts savings for good adjusters.
Guillaumont & Chauvet (2001)	Aid effectiveness is contingent on environmental factors(shocks and hazards)
Collier & Dehn(2001)	Aid effectiveness depends on negative supply shocks. Targeting aid contingent of negative supply shocks is better than 'targeting' based on good policies.
Collier & Dollar(2001)	The positive effect of aid on poverty depends on its impact on per-capita income growth; and impact of per-capita income growth on poverty reduction.
Feeny (2003)	The sectoral allocation of foreign aid to Papua New Guinea has been broadly in line with a strategy to effectively reduce poverty and increase human well-being.
Gomanee et al.(2003)	Aid has either a direct effect on welfare or indirect effect through public spending on social services.
Clement et al. (2004)	Aid has a short-term positive impact on growth
Ishfaq (2004)	Foreign Aid, in a limited way though, has helped in reducing the extent of poverty in Pakistan.
Mosley et al. (2004)	Foreign assistance has an indirect impact on poverty and the well-being of recipient countries.
Addison et al. (2005)	Aid increases pro-poor public expenditure and has a positive effect on growth. Aid broadly works to mitigate poverty, and poverty would be higher in the absence of aid.
Fielding et al. (2006)	There is a straight forward positive impact of aid on development outcomes.

Source(Author)

In the second strand, we find studies brandishing the positive effects of aid on growth and development. Among these works, we shall highlight that of Burnside & Dollar (2000) which conclude on the effectiveness of aid when policies are good. The Burnside & Dollar(2000) paper has received significant comments from researchers(Guillaumont & Chauvet, 2001; Colier &

Dehn, 2001; Easterly et al., 2003); comments that have been challenged as being "extremely data dependent"(Clemens et al.,2004).

2.2 Africa's needs and Western responses

A substantial number of African countries lie quite low on standard international comparisons. Borrowing from Easterly (2005a), they occupy most of the bottom places in income per capita, percentage of population living in extreme poverty(less than one US dollar a day), life expectancy, infant mortality, literacy, AIDS prevalence and the HDI. The last four decades have been those of extreme growth dismay in Africa. The West has responded to Africa's tragedy with intensive involvement of foreign-aid agencies and international organizations. In the mean, African countries receive much more aid in terms of percentage GDP than other developing countries. The West does more because Africa is poor, nay its efforts are supposed to have positive impacts on development.

The year 2005 was that during which the West pressed hardest to salvage Africa. In July of that year, the G8 agreed to double foreign-aid to Africa from $25 billion a year to $50 billion to finance the 'Big push', as well as erase African aid-loans incurred during previous attempts at a 'Big push'. Before this effort, Africa was already the most aid-intensive region on the planet. In September of that same year, world leaders assembled at the United Nations to further discuss progress on ending poverty in the continent.

2.3 Theories and effects of Western assistance on Africa

2.3.1 The Big-Push models and foreign-aid

In line with Easterly (2005a), '*Big-Push*' models postulate that Africa is poor because it is stuck in a 'poverty trap'. To emerge from the poverty trap, the continent need's a large aid-

financed increase in investment; a 'Big Push'. Both the Harrod-Domar and the Solow growth models have been used to elucidate the mechanisms of the poverty trap. The first mechanism is that, savings are quite low for people who are very nigh to subsistence (as outlined by a Stone-Geary utility function). In a closed economy, savings and investment are equal, thus investment is quite thin. In the Harrod-Domar model with the capital constraint binding, per capita growth in GDP is a mere linear function of the investment (=saving) rate minus the population and depreciation rates. If the saving is quite low to compensate for population growth and the depreciation of capita, then per capita growth in the economy will be zero or negative. In the 1950s and 1960s, early development economists postulated a desirable per capita growth rate and calculated the 'investment requirement' to meet this target: the deviation between the low domestic savings rate and the 'investment requirement' was termed the 'Financing Gap'. The object of aid was hence to cover the Financing Gap (Rostow, 1960; Chenery & Strout, 1966). Thus this model foresaw a strong growth effect for foreign-aid via its role in boosting domestic investment above what domestic savings could finance. Although this model soon went out of esteem in the academic literature on development, it remained somehow relevant in international organizations like the World Bank. Current policy proponents promoting foreign-aid to Africa have explicitly positioned their cases in favor of this model (Devarajan et al., 2002 at the World Bank; Blair Commission on Africa, 2005; Sachs, 2005). Sach(2005) has posited: *"success in ending the poverty trap will be much easier than it appears"*. He has asserted that the increase in foreign-aid and debt relief can end Africa's poverty in our generation. In a closed economy, savings depend not only on the margin from subsistence but also on the incentive to save contingent on the rate of return to savings and investment. In an open economy for instance, investment is not only a function of domestic savings but is also endogenous to the rate of return

to investment. As shown by Africa's extensive capital flight in which an estimated 39% of African capital stock is held outside the continent(Collier et al.,2001), domestic investors compare the returns to domestic and foreign investments: since private foreign investors and bank lenders will invest in an economy only if returns are very appealing. In the Solow model, a strong link between income and saving rates could generate multiple equilibria at low and high thresholds of capital stock, resurfacing the possibility of a poverty trap. Again, the low domestic savings do not pose much of an issue in an open economy in which investment reacts to incentives. Kraay & Raddatz(2005) have shown that the relationship between initial capital and savings must follow an S-shaped curve to generate a poverty trap; however they stop short of finding significant evidence for this shape in their data.

The second poverty generating mechanism is some sort of nonconvexity of the production function in the Solow model. There could be strong external economies to investment or there maybe high fixed costs to investment projects such that a minimum threshold must be surpassed for investment to be rewarding (productive). This perspective inspired the original article that first proposed a 'Big Push' (Rosentein-Rodan, 1943). This strand has had a longer shelf-life in the academic literature than the "Financing Gap" model (mechanism) because of the great esteem of theorists in models with multiple equilibira(Murphy et al., 1989). In emphasizing such nonconvexities, Sach(2005) has posited that Africa is in a poverty trap. 'Big Push' models foretell strong impacts of foreign-aid on investment and growth (development). This prediction has been subject to a vast empirical literature which this paper has already covered and summarized above (see Table 1 in Section 2.1).

2.3.2 Project interventions: education and health

Another strand of Africa's poverty has been that, it results from low human capital (poor health & education) and infrastructure. This emphasis which began in the 1960s is still central in explaining Africa's poverty. Whereas enrollments have soared rapidly, the quality of education is hampered by missing inputs like textbooks and other school material, weak incentives for teachers, corruption in education bureaucracies and disruption of schooling by political crisis (Filmer & Pritchett, 1997). In health, some of the initial progress has slowed, possibly due to corruption in the health sector (studies in Cameroon, Guinea, Uganda and Tanzania show that 30 to 70% of government drugs disappeared before reaching patients) and more complicated health problems cannot be solved with routine methods(Filmer et al., 2000; Pritchett & Woolcock,2004).

2.3.3 Models of policies and growth

The structural adjustment programs emerged from another strand as to why Africa remains poor and this gained prominence in the early 1980s with the advent of the 'Washington consensus' and the pro-free markets arguments of people like the renowned World Bank chief economist Anne Krueger. With respect to this thesis, Africa is poor because its governments have chosen bad policies. Indeed, it is obvious that many African governments pursued policies very detrimental to growth and economic development: artificially overvalued currencies, high black market premiums on foreign exchange, controls on interest rates that led to negative real interest rates for savers, drastic (radical) restrictions on international trade and almost exclusive reliance on state enterprise. The 'bad policies' perception of Africa's poverty led to a different perspective of the role of aid. The role of Western donors and international institutions in this view was to induce changes in African policies by making aid endogenous to such changes.

Structural adjustment loans of the IMF and the World Bank were thus embodied in this framework: which had as object an "adjustment with growth". How successful have these loans been in facilitating macroeconomic adjustment, that is to say: changing policy? How successful has development assistance been in inducing appealing policies? The answer from a substantial bulk of literature appears to be that Western donors and international institutions have not been very successful at changing policy (Alesina & Dollar, 2002; Burnside & Dollar, 2000; Van de Walle, 2001; Easterly, 2005b). However these studies are based on old data. Perhaps using much recent data (as this paper aims) could provide different trends in the nexus.

2.3.4 Dysfunctional donors

Borrowing from Easterly (2005a), while all the attention in the 'aid and development' debate is focused on Africa, it is also interesting to examine how effective donors were in delivering valuable services to the continent. There have been substantial uncomfortable signs of donor dysfunction. A case in point is the over 2 billion US dollars spent on roads in Tanzania over the last two decades. Yet roads have not improved. Even by bureaucratic standards, foreign-aid bureaucracy is dire. Why? Maybe it is because efforts and results in aid are largely unobservable and noticed only by the voiceless and powerless poor. Thus, the absence of visibility on feed-backs and results makes aid bureaucracies unaccountable. Unlike democratic governments or private firms in rich countries, aid agencies do not face a "voter test" or "a market test". Hence Africa's poor could be conceived as political orphans; with no voice or feedback on if aid is helping (and nobody accountable to them).

2.4 Aids, institutions and development

An extensive literature on institutions and development suggests that Africa is poor because it has poor institutions: dictatorship, lack of property rights, weak courts and contract enforcement, violence and political instability, hostile regulatory environment for private business and price instability. In a bid to end African poverty, according to this perspective the West needs to promote good institutions and governance. Svensson(2000) finds that aid increases corruption in ethnically fractionalized states (which is the situation of most African countries). The results of Knack (2001) suggest that higher aid worsens bureaucratic quality, leads to violation of established laws with great impunity and more corruption (controlling for potential reverse causality). In the same line of march, Djankov et al.(2005) notice that high aid caused setbacks to democracy between 1960 and 1999. Indeed they found aid's effect on democracy to be worse than that attributed to the 'natural resource curse'.

From the interesting literature on aid and institutions, in examining if donors can still influence institutions at the margin, three questions have received much attention. Firstly, do donors give more to poor countries who have better institutions (e.g less corruption, more democracy)? Secondly, does aid induce better or worse institutional quality? Thirdly, how would outsiders engineer a transition from the present state of informal institutions towards more formal institutional settings? The first question is relevant because there is a presumption by donors that aid would be more effective in countries with better institutions. The answer to the first issue also affects the response to the second. Thus, if donors give more aid to countries with better institutions, this would create some motivation for reformers in the recipient country to adapt better institutions. Surprisingly, Alesina & Dollar (2000) and Alesina & Weder(2002) find no evidence that democracies or less corrupt states are rewarded with more aid. Lastly, there is

the thorny third issue about how aid would practically go about changing institutions in the interest of recipient countries. The transition from informal to formal institutions is somehow complex. Attempts by Western aid agencies to introduce top-down formal institutions have not fared well in the complicated maze of bottom-up arrangements in African societies. Dixit (2004) has an interesting argument as to how introducing imperfect rule-based institutions could actually make things worse: they create outside opportunities for members of relationship-based networks. Network members can then cheat on their partners and vacate to operate in the rule-based system. A society could get caught in-between formal and informal institutions with neither working appropriately. Before closing this section, it is worthwhile noting that this part of the literature has guided our choice of institutional quality benchmarks we shall employ in the empirical phase of this paper. These include: control of corruption, government effectiveness, political stability (no violence), voice & accountability, rule of law, regulation quality and democracy.

2.5 The scope and positioning of the current paper

According Clement et al.(2004), aggregate aid could be divided into three categories: (1) emergency and humanitarian aid(likely to be negatively correlated with growth); (2) aid that impacts growth only over the long-term(if at all), such as aid to support democracy, the environment, health or education; and (3) aid that plausibly could stimulate growth in the long term, including budget and balance of payments support, investments in infrastructure and aid for productive sectors (such as agricultural and industrial). Whereas aid effectiveness papers implicitly define donors' objective as solely the promotion of economic growth or the reduction of poverty in the recipient countries, a parallel strand of literature on aid allocation has sustained that most donors often pursue a different underlying agenda by allocating aid according to their

own strategic interest. Masud & Yontcheva(2005) have underlined that if a significant part of aid is channeled for strategic purposes, no positive impact in terms of growth or poverty alleviation should be expected. We partially negate this claim by arguing that; foreign-aid irrespective of vested donor-interest should contribute to institutional development (degradation) either directly or indirectly.

From the interesting literature on aid and institutions, the debate has centered around three main questions (strands) as we have observed in the preceding section. This paper contributes to existing literature by integrating the last two strands within the same empirical framework. Thus we put some empirical structure on the aid-institutions nexus in order to give policymakers guidance on how to approach the two questions of the debate. In substance this work attempts to elucidate the following questions. Are the institutional benefits of development-assistance contingent on existing institutional quality **(**second strand)? At what institutional thresholds will foreign-aid be instrumental in improving institutional quality (third strand)? Are the institutional benefits of foreign-aid questionable until greater domestic institutional development has taken place (second and third strands)?

It has been well documented in the globalization-development literature that certain 'threshold' levels of financial and institutional development are imperative for an economy to get the full indirect benefits and reduced risks of capital account globalization (Henry, 2007; Rodrik & Subramanian, 2009; Kose et al., 2011). Empirically assessing the aid-institutions nexus in the light of available weight of empirical evidence on 'threshold theories' in the openness-development literature could provide relevant policy implications on the last two complementary research questions highlighted above. Though not in form, yet in substance, the existing literature points to the existence of certain initial institutional threshold conditions (corruption,

democracy…etc) but lacks a unifying framework that explores the most quantifiable government quality indicators currently available (rule of law, regulation quality, corruption-control, government-effectiveness, voice & accountability, political stability or no violence and democracy)[3].

The contribution of this paper to the literature is fivefold. Firstly, we deviate from the mainstream approach to the aid-institutions nexus that does not incorporate all dimensions of government quality and provide an exhaustive assessment with seven institutional quality dynamics. Secondly, a substantial bulk of work in the literature is based on data collected between 1960 and 2001. By using much recent data, the paper provides an updated account of the nexus with more focused policy implications. Thirdly, owing to the debate on methodological issues in the assessment of foreign-aid effectiveness, this paper provides new dimensions to the debate by investigating the aid-development nexus when existing institutional quality dynamics matter. Thus there is the presumption here that certain institutional thresholds might be imperative in the effectiveness of foreign-aid. Fourthly, this paper integrates two of the three strands currently prevailing in the literature by putting some empirical structure on them, in order to oriented policymakers. Blanket aid policies   might not be effective unless they are contingent on the prevailing strands of the debate, existing levels of 'institutional development dynamics' and tailored differently across countries with the least and most advanced institutions. Fifthly, with 2015 approaching, it is momentous time to assess donors' objective of reaching the MDGs. In plainer terms, assessing the effectiveness of development assistance on institutions in the light of the four points underlined above (in the run-up to 2015) could provide crucial policy options to donor and multilateral agencies on their assistance impact.

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[3] This is probably because most studies are based on data collected between 1960 and 2001. Government quality indicators for developing countries were not available before 1996(See World Development Indicators: Good Governance).

3. Data and Methodology

3.1 Data

We examine a sample of 22 countries for the period 2002-2009 with data from African Development Indicators (ADI) of the World Bank (WB). Institutional quality dependent variables include: the rule of law, regulation quality, corruption-control, government-effectiveness, voice & accountability, political stability (or no violence) and democracy. The independent variable of interest is Net Official Development Assistance (NODA). For robustness purposes we use three different NODA indicators: Total NODA; NODA from the Development Assistance Committee (DAC) countries; and NODA from Multilateral Donors. Whereas the first is used in the empirical section, the last two have been used for robustness checks. Borrowing from recent development threshold literature (Asongu, 2012c), we control for inflation, economic prosperity, population growth, autocracy, foreign investment, trade, per capita economic prosperity and public investment. Summary statistics with presentation of countries (Appendix 1), variable definitions (Appendix 2) and correlation analysis (Appendix 3) are detailed in the appendices.

3.2 Methodology

Borrowing from Billger & Goel (2009) and recent development threshold literature (Asongu,2012c) to determine whether existing levels in development dynamics affects how development assistance comes into play, we use quantile regression. This approach permits us to investigate if the relationship between institutional dynamics and foreign-aid differs throughout the distributions of institutional dynamics (Koenker & Hallock, 2001).

Some studies on the determinants of institutional-quality are based on estimation by Ordinary Least Squares (OLS), which report parameter estimates at the conditional mean of

institutional development. Whereas mean effects are certainly important, this study broadens such findings using quantile regression. In addition, one of the underlying assumptions of OLS regression is that the error term and the dependent variable are normally distributed. However, in quantile regression the error term need not be distributed normally. Thus, based on this estimation technique we are able to carefully assess the incidence of development assistance throughout the conditional distribution with particular emphasis on countries with the best and worst institutions. Quantile regression(hence QR) yields parameters estimated at multiple points in the conditional distribution of the dependent variable(Koenker & Bassett, 1978) and has gained increasing relevance in recent development literature(Billger & Goel, 2009; Okada & Samreth, 2012). Beyond these facts, the choice of this estimation technique is in line with the research hypotheses stressed in the motivation of the paper. Accordingly, the θ th quantile estimator of the endogenous variable is obtained by solving for the following optimization problem.

$$\min_{\beta \in R^k}\left[\sum_{i \in \{i:y_i \geq x_i'\beta\}} \theta\,|y_i - x_i'\beta| + \sum_{i \in \{i:y_i \geq x_i'\beta\}} (1-\theta)|y_i - x_i'\beta|\right] \tag{1}$$

Where $\theta \in (0,1)$. Contrary to OLS that is based on minimizing the sum of squared residuals, with QR we minimize the weighted sum of absolute deviations. For example the 10th or 75th quantiles (with θ =0.10 or 0.75 respectively) by approximately weighing the residuals. The conditional quantile of y_i given x_i is:

$$Q_y(\theta\,/\,x_i) = x_i'\beta_\theta \tag{2}$$

where unique slope parameters are derived for each θ th quantile of interest. This formulation is analogous to $E(y/x) = x_i'\beta$ in the OLS slope though parameters are estimated only at the mean of the conditional distribution of the endogenous variable. For the model in Eq.(2) the

dependent variable y_i is an institutional quality indicator while x_i contains a constant term, foreign-aid, inflation, economic prosperity, population growth, autocracy, foreign investment, trade, per capita economic prosperity and public investment. The quantile estimation approach is more robust than the OLS approach in the presence of outliers when the distribution of the dependent variable is a highly non-normal pattern (Okada & Samreth, 2012; Asongu, 2012c). We also report findings for Least Absolute Deviations (LAD) which should correspond to those of the 0.5[th] quantile.

4. Empirical analysis

4.1 Summary of results

The results presented in Tables 3-6 include OLS, LAD and QR estimates. OLS estimates provide a baseline of mean effects and we compare these to estimates of LAD and separate quantiles in the conditional distributions of the institutional development dependent variables. In the interpretation of estimated coefficients, it is worth noting that smaller values (in conditional distributions) of the dependent variable denote less institutional quality (democracy, rule of law, regulation quality, government effectiveness, political stability, voice & accountability and corruption-control). Table 3 shows results for the rule of law (Panel A) and regulation quality (Panel B) regressions. Table 4 reports findings on government effectiveness (Panel A) and political stability (Panel B). Results pertaining to Table 5, reflect those of voice & accountability and control of corruption. Democracy regressions are disclosed in Table 6.

Table 2 below summaries foreign-aid elasticities of institutional development based on Tables 3-6. This spirit of this summary is to synthesize the incidence of foreign-aid on institutional development when existing government-quality dynamics matter. Hence from horizontal and vertical comparative perspectives, policy-makers could have some guidance on

the issue of institutional benchmarks (thresholds) in the African aid-development nexus. Based on the summary of results below, the following broad conclusions could be established. (1)While bottom quantiles of the institutional dynamic distributions reflect positive foreign-aid elasticities of government quality, top quantiles suggest the contrary. (2) Foreign-aid is more likely to improve institutional development when existing institutional development levels are low than when good governance is already substantial in an economy.

Table 2: Summary of results (foreign-aid elasticities of institutional development)

	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90
			Rule of Law					**Regulation Quality**		
Spec. 1	0.019***	0.014***	-0.014***	-0.009	-0.013***	0.007*	0.009	-0.014***	-0.003	-0.009
Spec. 2	0.020***	0.004	-0.031***	-0.037***	-0.036***	0.018***	0.013***	-0.016***	-0.035***	-0.051***
			Government Effectiveness					**Political Stability**		
Spec. 1	0.017***	0.006	-0.016***	-0.007**	0.003***	-0.003	0.010	0.010	-0.004	-0.003
Spec. 2	0.011***	-0.0007	-0.008	-0.042***	-0.059***	0.036***	-0.001	0.004	-0.011	-0.016*
			Voice & Accountability					**Control of Corruption**		
Spec. 1	0.008**	-0.019***	-0.011**	-0.013***	-0.010***	0.015***	0.0109	-0.008*	-0.005	0.020***
Spec. 2	0.009***	-0.002	0.009	-0.038***	-0.035***	0.011*	0.003	-0.008	-0.044***	-0.046***
			Democracy							
Spec. 1	0.052***	-0.029	-0.097***	-0.121***	-0.052***					
Spec. 2	-0.015	0.032**	0.027	-0.157***	-0.158***					

*,**,***, denote significance levels of 10%, 5% and 1% respectively. Lower quantiles (e.g., Q 0.1) signify nations where institutional quality is least. Spec: Specification.

Table 3 below shows results for the rule of law(Panel A) and regulation quality(Panel B) regressions on the aid-development nexus when existing institutional levels in the 'rule of law' and regulation quality matter. From Panel A, it could be observed from the first specification that 'development assistance' bears a positive relation with the 'rule of law' only when existing 'rule of law' levels are low; implying only bottom quantiles of the institutional quality distribution reflect some positive incidence of foreign-aid on institutional development. These findings are consistent with the second specification of the panel as well as the two specifications pertaining to 'regulation quality' distributions in Panel B. Most control variables are significant with the

right signs since: (1) inflationary pressures could seriously infringe on the 'rule of law' and regulation quality, as evidenced from the socio-political unrests across Africa owing to soaring food prices in 2008; (2) population growth inherently reflects a danger to the 'rule of law' if measures are not put in place to improve security in the face of rising demography; and (3) autocratic governments are generally associated with little regulation quality and 'rule of law' in the African continent(Asongu, 2011).

Table 4 below reports findings on 'government effectiveness' (Panel A) and 'political stability' (Panel B). But for the positive effect in the top quantile of the government-effectiveness distribution in the first specification, findings are broadly consistent with those in Table 3. Thus, the institutional benefits of foreign-aid are present only in bottom quantiles of the government-effectiveness and political-stability distributions. This establishment is valid across specifications and distributions. Most control variables are significant with the rights signs; their elucidation is in line with the interpretations already given above with respect to Table 3.

Results pertaining to Table 5 below reflect those of 'voice & accountability' and 'control of corruption'. But for the top quantile of the 'corruption-control' distribution (in specification 1), findings across specifications and distributions are in line with those of Tables 3-4. The interpretation of foreign-aid and control variables elasticities are similar to those pertaining to Tables 3-4.

Democracy regressions as disclosed in Table 6 below are no exception to the rule regarding the findings and interpretations already outlined in respect of results in the preceding tables.

Table 3: Rule of Law and Regulation Quality

Panel A: Rule of Law

	OLS	LAD	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90
Specification 1							
Constant	**0.528***	**0.483***	**-1.091***	0.064	**0.483***	**1.213***	**1.335***
	(0.000)	**(0.054)**	**(0.000)**	(0.286)	**(0.000)**	**(0.000)**	**(0.000)**
Development Assistance	0.003	**-0.014***	**0.019***	**0.014***	**-0.014***	-0.009	**-0.013***
	(0.568)	**(0.069)**	**(0.000)**	**(0.000)**	**(0.000)**	(0.113)	**(0.002)**
Economic Prosperity	0.008	0.005	-0.002	0.002	0.005	-0.004	-0.003
	(0.485)	(0.732)	(0.501)	(0.712)	(0.589)	(0.733)	(0.692)
Inflation	-0.004	**-0.008***	-0.0007	-0.001	**-0.008***	**-0.008***	**-0.005***
	(0.226)	**(0.019)**	(0.362)	(0.422)	**(0.000)**	**(0.015)**	**(0.035)**
Population growth	**-0.460***	**-0.276***	**-0.142***	**-0.421***	**-0.276***	**-0.440***	**-0.427***
	(0.000)	**(0.002)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**
Autocracy	**-0.029***	**-0.055***	**0.022***	**-0.045***	**-0.055***	**-0.082***	**-0.083***
	(0.025)	**(0.054)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**
Observations	176	176	176	176	176	176	176
Specification 2							
Constant	**-0.627***	**-0.408***	**-1.629***	**-1.212***	**-0.408***	**-0.405***	**-0.718***
	(0.000)	**(0.051)**	**(0.000)**	**(0.000)**	**(0.001)**	**(0.000)**	**(0.000)**
Development Assistance	**-0.022***	**-0.031***	**0.020***	0.004	**-0.031***	**-0.037***	**-0.036***
	(0.002)	**(0.000)**	**(0.000)**	(0.510)	**(0.000)**	**(0.000)**	**(0.000)**
Foreign Direct Investment	0.008	0.023	-0.006	0.002	**0.023***	0.000	0.004
	(0.530)	(0.357)	(0.167)	(0.851)	**(0.048)**	(0.997)	(0.171)
Trade	0.0003	-0.0004	-0.0001	-0.0003	-0.0004	**0.005***	**0.012***
	(0.804)	(0.824)	(0.794)	(0.774)	(0.699)	**(0.000)**	**(0.000)**
Per capita Economic Prosperity	-0.015	0.005	-0.004	**-0.029***	0.005	**0.015***	**0.010***
	(0.254)	(0.833)	(0.349)	**(0.035)**	(0.683)	**(0.021)**	**(0.005)**
Public Investment	**0.045***	0.033	**0.036***	**0.050***	**0.033***	**0.023***	**0.035***
	(0.004)	(0.139)	**(0.000)**	**(0.001)**	**(0.015)**	**(0.001)**	**(0.000)**
Observations	176	176	176	176	176	176	176

Panel B: Regulation Quality

	OLS	LAD	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90
Specification 1							
Constant	**0.397***	**0.749***	**-0.531***	**-0.387***	**0.749***	**1.012***	**0.984***
	(0.000)	**(0.001)**	**(0.000)**	**(0.010)**	**(0.000)**	**(0.000)**	**(0.000)**
Development Assistance	-0.005	**-0.014***	**0.007***	0.009	**-0.014***	-0.003	-0.009
	(0.288)	**(0.007)**	**(0.060)**	(0.180)	**(0.000)**	(0.284)	(0.345)
Economic Prosperity	0.001	-0.002	-0.012	-0.016	-0.002	**0.011***	0.016
	(0.906)	(0.899)	(0.129)	(0.251)	(0.744)	**(0.060)**	(0.406)
Inflation	**-0.006***	**-0.006***	-0.002	-0.004	**-0.006***	**-0.005***	**-0.010***
	(0.023)	**(0.002)**	(0.375)	(0.240)	**(0.000)**	**(0.000)**	**(0.057)**
Population growth	**-0.280***	**-0.325***	**-0.173***	-0.113	**-0.325***	**-0.435***	**-0.269***
	(0.000)	**(0.000)**	**(0.000)**	(0.143)	**(0.000)**	**(0.000)**	**(0.012)**
Autocracy	**-0.038***	**-0.086***	0.003	-0.006	**-0.086***	**-0.095***	**-0.093***
	(0.000)	**(0.000)**	(0.000)	(0.653)	**(0.000)**	**(0.000)**	**(0.000)**
Observations	176	176	176	176	176	176	176
Specification 2							
Constant	-0.180	-0.096	**-1.220***	**-0.833***	-0.096	0.175	**0.554***
	(0.128)	(0.554)	**(0.000)**	**(0.000)**	(0.401)	(0.167)	**(0.000)**
Development Assistance	**-0.017***	-0.016	**0.018***	**0.013***	**-0.016***	**-0.035***	**-0.051***
	(0.004)	(0.106)	**(0.000)**	**(0.000)**	**(0.006)**	**(0.000)**	**(0.000)**
Foreign Direct Investment	-0.003	-0.0001	**-0.021***	**-0.015***	-0.0001	**0.021***	0.014
	(0.764)	(0.993)	**(0.060)**	**(0.004)**	(0.988)	**(0.066)**	(0.228)
Trade	-0.000	-0.002	**0.002***	**0.001***	**-0.002***	-0.001	-0.0006
	(0.944)	(0.228)	**(0.024)**	**(0.003)**	**(0.065)**	(0.237)	(0.606)
Per capita Economic Prosperity	-0.018	-0.012	**-0.033***	**-0.032***	-0.012	0.008	0.007
	(0.115)	(0.610)	**(0.005)**	**(0.000)**	(0.275)	(0.521)	(0.564)
Public Investment	0.004	0.009	0.009	-0.001	0.009	0.011	0.013
	(0.723)	(0.694)	(0.457)	(0.852)	(0.435)	(0.398)	(0.345)
Observations	176	176	176	176	176	176	176

Notes. Dependent variables are Regulation Quality and the Rule of Law. *,**,***, denote significance levels of 10%, 5% and 1% respectively. Lower quantiles (e.g., Q 0.1) signify nations where Regulation Quality and(or) the Rule of Law are(is) least. P-values in brackets.

Table 4: Government Effectiveness and Political Stability

	Panel A: Government Effectiveness						
	OLS	**LAD**	**Q 0.1**	**Q 0.25**	**Q 0.50**	**Q 0.75**	**Q 0.90**
				Specification 1			
Constant	**0.488*****	**0.856*****	**-0.870*****	**-0.265*****	**0.856*****	**1.029*****	**1.347*****
	(0.000)	**(0.009)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**
Development Assistance	-0.0006	**-0.016****	**0.017*****	**0.006**	**-0.016*****	**-0.007****	**0.003*****
	(0.911)	**(0.033)**	**(0.000)**	(0.144)	**(0.000)**	**(0.049)**	**(0.000)**
Economic Prosperity	0.009	0.017	**-0.007***	-0.002	**0.017****	**0.006**	**-0.004*****
	(0.382)	(0.339)	**(0.097)**	(0.758)	**(0.036)**	**(0.393)**	**(0.000)**
Inflation	-0.003	-0.004	0.001	-0.001	**-0.004****	**-0.004****	**-0.004*****
	(0.300)	(0.210)	(0.214)	(0.586)	**(0.040)**	**(0.027)**	**(0.000)**
Population growth	**-0.397*****	**-0.405*****	**-0.165*****	**-0.194*****	**-0.405*****	**-0.400*****	**-0.489*****
	(0.000)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**
Autocracy	**-0.037*****	**-0.102*****	**0.013*****	**-0.025*****	**-0.102*****	**-0.096*****	**-0.105*****
	(0.001)	**(0.001)**	**(0.003)**	**(0.005)**	**(0.000)**	**(0.000)**	**(0.000)**
Observations	176	176	176	176	176	176	176
				Specification 2			
Constant	**-0.382*****	**-0.616*****	**-1.507*****	**-0.783*****	**-0.616*****	**-0.028**	**0.354*****
	(0.000)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.789)**	**(0.000)**
Development Assistance	**-0.022*****	-0.008	**0.011*****	-0.0007	-0.008	**-0.042*****	**-0.059*****
	(0.000)	(0.476)	**(0.000)**	(0.930)	(0.191)	**(0.000)**	**(0.000)**
Foreign Direct Investment	0.000	0.003	0.000	0.003	0.003	**-0.018***	**-0.014****
	(0.973)	(0.910)	(0.999)	(0.792)	(0.801)	**(0.065)**	**(0.017)**
Trade	-0.0006	-0.0001	**0.001*****	-0.001	-0.0001	-0.0004	-0.0001
	(0.582)	(0.964)	**(0.000)**	(0.235)	(0.933)	(0.691)	(0.758)
Per capita Economic Prosperity	-0.012	-0.009	**-0.013*****	**-0.036****	-0.009	0.0027	**0.027*****
	(0.302)	(0.755)	**(0.000)**	**(0.023)**	(0.446)	(0.795)	**(0.000)**
Public Investment	**0.034****	0.035	**0.030*****	**0.036****	**0.035****	**0.056*****	**0.041*****
	(0.015)	(0.138)	**(0.000)**	**(0.038)**	**(0.012)**	**(0.000)**	**(0.000)**
Observations	176	176	176	176	176	176	176

	Panel B: Political Stability						
	OLS	**LAD**	**Q 0.1**	**Q 0.25**	**Q 0.50**	**Q 0.75**	**Q 0.90**
				Specification 1			
Constant	**0.611*****	**0.659*****	**-0.435***	**0.414*****	**0.659*****	**1.343*****	**1.628*****
	(0.002)	**(0.009)**	**(0.059)**	**(0.005)**	**(0.000)**	**(0.000)**	**(0.000)**
Development Assistance	0.012	0.010	-0.003	0.010	0.010	-0.004	-0.003
	(0.194)	(0.433)	(0.748)	(0.160)	(0.203)	(0.602)	(0.544)
Economic Prosperity	-0.005	-0.003	-0.034	-0.007	-0.003	-0.023	**-0.035*****
	(0.792)	(0.896)	(0.127)	(0.612)	(0.836)	(0.202)	**(0.001)**
Inflation	-0.002	-0.003	0.004	0.001	-0.003	**-0.009***	**-0.010*****
	(0.601)	(0.566)	(0.493)	(0.662)	(0.523)	**(0.059)**	**(0.007)**
Population growth	**-0.477*****	**-0.382*****	**-0.445*****	**-0.631*****	**-0.382*****	**-0.300*****	**-0.319*****
	(0.000)	**(0.006)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.001)**	**(0.000)**
Autocracy	-0.018	**-0.067***	**0.082*****	**-0.003**	**-0.067*****	**-0.113*****	**-0.109*****
	(0.367)	**(0.074)**	**(0.000)**	**(0.839)**	**(0.000)**	**(0.000)**	**(0.000)**
Observations	176	176	176	176	176	176	176
				Specification 2			
Constant	**-1.061*****	**-0.725*****	**-3.054*****	**-1.564*****	**-0.725*****	-0.357	-0.005
	(0.000)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	(0.250)	(0.978)
Development Assistance	-0.003	0.004	**0.036*****	-0.001	0.004	-0.011	**-0.016***
	(0.752)	(0.739)	**(0.000)**	(0.923)	(0.605)	(0.460)	**(0.087)**
Foreign Direct Investment	0.004	0.006	-0.001	-0.023	0.006	**0.077*****	**0.036****
	(0.819)	(0.841)	(0.903)	(0.323)	(0.678)	**(0.008)**	**(0.036)**
Trade	**0.007*****	0.004	**0.012*****	**0.007*****	**0.004****	**0.005***	**0.007*****
	(0.000)	(0.152)	**(0.000)**	**(0.002)**	**(0.012)**	**(0.054)**	**(0.000)**
Per capita Economic Prosperity	-0.025	-0.034	0.0004	-0.033	**-0.034****	-0.033	-0.022
	(0.177)	(0.127)	(0.967)	(0.185)	**(0.039)**	(0.271)	(0.210)
Public Investment	0.030	0.021	0.019	0.038	0.021	0.008	0.013
	(0.155)	(0.475)	(0.121)	(0.167)	(0.255)	(0.799)	(0.502)
Observations	176	176	176	176	176	176	176

Notes. Dependent variable are Government-effectiveness and Political-stability. *,**,***, denote significance levels of 10%, 5% and 1% respectively. Lower quantiles (e.g., Q 0.1) signify nations where Government-effectiveness and(or) Political-stability are(is) least. P-values in brackets.

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Table 5: Voice & Accountability and Control of Corruption

Panel A: Voice & Accountability

	OLS	LAD	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90
Specification 1							
Constant	0.375**	1.010***	-1.312***	0.184	1.010***	1.068***	1.085***
	(0.015)	(0.000)	(0.000)	(0.154)	(0.000)	(0.000)	(0.000)
Development Assistance	-0.0006	-0.011	0.008**	-0.019***	-0.011**	-0.013***	-0.010***
	(0.930)	(0.332)	(0.016)	(0.002)	(0.047)	(0.000)	(0.000)
Economic Prosperity	0.005	-0.0004	-0.010	-0.019	-0.0004	-0.008	-0.003
	(0.729)	(0.978)	(0.111)	(0.115)	(0.969)	(0.156)	(0.326)
Inflation	-0.002	-0.005	0.002	-0.0004	-0.005	-0.004***	-0.006***
	(0.509)	(0.405)	(0.170)	(0.899)	(0.119)	(0.005)	(0.000)
Population growth	-0.293***	-0.360***	-0.025	-0.172***	-0.360***	-0.255***	-0.202***
	(0.000)	(0.001)	(0.473)	(0.010)	(0.000)	(0.000)	(0.000)
Autocracy	-0.106***	-0.216***	-0.009	-0.147***	-0.216***	-0.215***	-0.214***
	(0.000)	(0.000)	(0.165)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	176	176	176	176	176	176	176
Specification 2							
Constant	-0.465***	-0.564*	-1.452***	-1.032***	-0.564**	0.083	0.519***
	(0.007)	(0.065)	(0.000)	(0.000)	(0.022)	(0.565)	(0.000)
Development Assistance	-0.007	0.009	0.009***	-0.002	0.009	-0.038***	-0.035***
	(0.392)	(0.709)	(0.000)	(0.726)	(0.476)	(0.000)	(0.000)
Foreign Direct Investment	0.010	0.018	-0.007*	0.003	0.018	0.004	-0.005**
	(0.529)	(0.700)	(0.063)	(0.788)	(0.418)	(0.739)	(0.016)
Trade	0.001	0.004	0.0006*	-0.001	0.004*	0.003**	0.002***
	(0.415)	(0.338)	(0.100)	(0.365)	(0.078)	(0.029)	(0.000)
Per capita Economic Prosperity	-0.028*	-0.061*	-0.011***	-0.006	-0.061**	-0.009	0.018***
	(0.093)	(0.081)	(0.005)	(0.637)	(0.012)	(0.527)	(0.000)
Public Investment	0.006	-0.016	0.0005	-0.0003	-0.016	0.031*	-0.003
	(0.742)	(0.692)	(0.902)	(0.981)	(0.535)	(0.051)	(0.183)
Observations	176	176	176	176	176	176	176

Panel B: Control of Corruption

	OLS	LAD	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90
Specification 1							
Constant	0.649***	0.737***	-0.335***	0.125	0.737***	0.971***	1.689***
	(0.000)	(0.000)	(0.000)	(0.540)	(0.000)	(0.000)	(0.000)
Development Assistance	0.005	-0.008	0.015***	0.0109	-0.008*	-0.005	0.020***
	(0.270)	(0.262)	(0.000)	(0.270)	(0.070)	(0.108)	(0.000)
Economic Prosperity	0.004	0.003	0.005**	-0.005	0.003	-0.009	-0.025***
	(0.693)	(0.823)	(0.025)	(0.783)	(0.691)	(0.126)	(0.002)
Inflation	-0.002	-0.003	0.0008	-0.0005	-0.003	-0.003**	-0.001
	(0.318)	(0.345)	(0.146)	(0.923)	(0.157)	(0.039)	(0.539)
Population growth	-0.508***	-0.437***	-0.405***	-0.441***	-0.437***	-0.411***	-0.649***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Autocracy	0.034***	-0.069***	0.005**	-0.007	-0.069***	-0.086***	-0.107***
	(0.002)	(0.002)	(0.033)	(0.715)	(0.000)	(0.000)	(0.000)
Observations	176	176	176	176	176	176	176
Specification 2							
Constant	-0.666***	-0.870***	-1.398***	-1.197***	-0.870***	-0.329**	0.278
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.025)	(0.106)
Development Assistance	-0.019***	-0.008	0.011*	0.003	-0.008	-0.044***	-0.046***
	(0.003)	(0.428)	(0.064)	(0.286)	(0.242)	(0.000)	(0.000)
Foreign Direct Investment	0.002	-0.010	-0.015	-0.001	-0.010	-0.011	0.041***
	(0.817)	(0.697)	(0.166)	(0.587)	(0.445)	(0.410)	(0.010)
Trade	0.001	0.003*	0.001	0.001***	0.003**	0.002*	-0.001
	(0.233)	(0.075)	(0.144)	(0.005)	(0.014)	(0.065)	(0.409)
Per capita Economic Prosperity	-0.021*	-0.001	-0.025**	-0.036***	-0.001	0.015	-0.007
	(0.092)	(0.954)	(0.032)	(0.000)	(0.896)	(0.272)	(0.658)
Public Investment	0.043***	0.023	0.032**	0.045***	0.023	0.049***	0.056***
	(0.002)	(0.277)	(0.014)	(0.000)	(0.136)	(0.002)	(0.003)
Observations	176	176	176	176	176	176	176

Notes. Dependent variable are Voice & Accountability and Control of Corruption. *,**,***, denote significance levels of 10%, 5% and 1% respectively. Lower quantiles (e.g., Q 0.1) signify nations where Voice & Accountability and(or) Control of Corruption are(is) least. P-values in brackets.

Table 6: Democracy

	OLS	LAD	Q 0.1	Q 0.25	Q 0.50	Q 0.75	Q 0.90
				Democracy			
				Specification 1			
Constant	6.863***	9.696***	-4.888***	9.063***	9.696***	10.964***	11.105***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Development Assistance	0.029	-0.097***	0.052***	-0.029	-0.097***	-0.121***	-0.052***
	(0.520)	(0.001)	(0.000)	(0.191)	(0.000)	(0.000)	(0.000)
Economic Prosperity	0.072	-0.025	0.179***	-0.036	-0.025	-0.087**	-0.111***
	(0.442)	(0.368)	(0.000)	(0.429)	(0.401)	(0.010)	(0.000)
Inflation	0.029	0.008	0.011	0.023*	0.008	0.008	0.018***
	(0.255)	(0.362)	(0.134)	(0.068)	(0.315)	(0.382)	(0.000)
Population growth	-1.655***	-1.014***	0.335**	-1.661***	-1.014***	-1.042***	-0.987***
	(0.001)	(0.004)	(0.027)	(0.000)	(0.000)	(0.000)	(0.000)
Autocracy	-0.305***	-1.190***	0.444***	-0.974***	1.190***	-1.108***	-1.063***
	(0.002)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Observations	176	176	176	176	176	176	176
				Specification 2			
Constant	1.493	-0.180	-3.786***	-1.640***	-0.180	7.182***	8.038***
	(0.118)	(0.927)	(0.000)	(0.000)	(0.799)	(0.000)	(0.000)
Development Assistance	-0.067	0.027	-0.015	0.032**	0.027	-0.157***	-0.158***
	(0.172)	(0.738)	(0.529)	(0.035)	(0.448)	(0.000)	(0.000)
Foreign Direct Investment	0.069	-0.067	0.176***	0.085***	-0.067	-0.160***	-0.126***
	(0.436)	(0.691)	(0.000)	(0.002)	(0.308)	(0.000)	(0.000)
Trade	0.004	0.041***	-0.008*	-0.0008	0.041***	0.017***	0.018***
	(0.632)	(0.003)	(0.066)	(0.763)	(0.000)	(0.000)	(0.000)
Per capita Economic Prosperity	-0.052	-0.294**	0.199***	0.098***	-0.294***	-0.147***	-0.025*
	(0.576)	(0.025)	(0.000)	(0.001)	(0.000)	(0.000)	(0.058)
Public Investment	0.317***	0.232**	0.340***	0.196***	0.232***	0.124***	0.016
	(0.002)	(0.026)	(0.000)	(0.000)	(0.003)	(0.001)	(0.270)
Observations	176	176	176	176	176	176	176

Notes. Dependent variable is Democracy. *,**,***, denote significance levels of 10%, 5% and 1% respectively. Lower quantiles (e.g., Q 0.1) signify nations where democracy is least. P-values in brackets.

4.2 Discussion, policy recommendations and limitations

Before delving into the discussion of the findings, it will be interesting to point-out the intuition motivating this paper. From the interesting literature on aid and institutions, the debate has centered around three main questions as we have already elucidated above. This preceding analysis has integrated the last two strands (questions) within the same empirical framework. Thus in a bid to put some empirical structure on these last two concerns in the aid-institutions nexus(so as to give policy makers guidance on the issues), this work has elucidated the following questions. (1) Are the institutional benefits of development-assistance contingent on existing institutional quality **(**second strand)? (2)At what institutional thresholds will foreign-aid be instrumental in improving institutional quality (third strand)? (3) Are the institutional benefits of

foreign-aid questionable until greater domestic institutional development has taken place (second and third strands)?

Based on the available weight of empirical evidence (as summarized in Table 2 above) we have stressed that foreign-aid is more likely to improve institutional development when existing institutional development levels are low than when they are high. This affirmation is valid for all seven government quality dynamics subject to consideration in the analysis. Thus the following answers could be provided to the tested hypotheses. (1) Institutional benefits of foreign-aid are contingent on existing institutional levels in Africa. (2) But for thin exceptions, foreign-aid is instrumental in institutional development in bottom quantiles of government-quality distributions for the most part. (3) The institutional benefits of foreign-aid are not questionable until greater domestic institutional development has taken place. The reverse is true instead. Government quality benefits of development assistance are questionable in countries with high levels of institutional development. As a policy implication, blanket policies based on the aid-development nexus are unlikely to be appropriate; therefore policy measures should be contingent on prevailing levels of institutional development and tailored differently across best and worst countries in terms of institutional development.

These results only partially validate recent findings (with updated data) in the African continent which have established that foreign-aid is perilous to government quality dynamics (Asongu, 2012a). This difference in results is entirely methodological and points to need of assessing the impact of foreign-aid through-out the conditional distributions of the institutional development dependent variable. Results of the paper may either broadly reflect the first or second strand of conflicts in the literature (summarized in Table 1) depending on which part of the distribution the observer stands. Whereas top quantiles of the institutional distributions

broadly reflect the first school of thought in the assertion of a negative aid-development nexus (Mosley,1992; Reichel, 1995; Ghura, 1995; Boone, 1996; Pedersen,1996; Asongu, 2012ab), bottom institutional quantile results validate postulations of the second strand, in which the aid-development nexus is perceived as positive(Burnside & Dollar, 2000; Ghura, 1995; Guillaumont & Chauvet, 2001; Collier & Dehn, 2001; Collier & Dollar,2001; Feeny, 2003; Gomanee et al.,2003; Clement et al.,2004; Ishfaq,2004; Mosley et al.,2004; Addison et al.,2005; Fielding et al.,2006).

It is also interesting to highlight that this paper has drawn much from the openness-development literature. It has been well documented in the globalization-development literature that certain 'threshold' levels of financial and institutional development are imperative for an economy get the full indirect benefits and reduced risks of capital account globalization (Henry, 2007; Rodrik & Subramanian, 2009; Kose et al., 2011). Empirically assessing the aid-institutions nexus in the light of available weight of empirical evidence on 'threshold theories' from the openness-development literature has provided relevant policy implications on the two research strands this paper has assessed from the aid-institutions literature. Though not in form, yet in substance we have complemented existing literature which points to the existence of certain initial institutional threshold conditions(corruption, democracy…etc) but lacks a unifying framework that explores the most quantifiable government quality indicators currently available(rule of law, regulation quality, corruption-control, government-effectiveness, voice & accountability, political stability or no violence and democracy).

The principal draw-back of these indicators however is that, they are perception-based measurements and could be subject to biased estimates (owing to media propaganda for instance). However to the best of our knowledge, good-governance measures from World

Development Indicators are the most reliable institutional measures in the development literature. More so, the use of a plethora of them (seven in total) and finding similar results across indicators somehow mitigates issues owing to variable selection bias. In substance this adds to the robustness of our empirical evidence and soundness of resulting policy recommendations.

5. Conclusion

The contribution of this paper to the literature has been fivefold. Firstly, we have deviated from the mainstream approach to the aid-institutions nexus that does not incorporate all dimensions of government quality and provided an exhaustive assessment with seven institutional quality dynamics. Secondly, a substantial bulk of work in the literature is based on data collected between 1960 and 2001. By using much recent data, the paper has provided an updated account of the aid-development nexus with more focused policy implications. Thirdly, owing to the debate on methodological issues in the assessment of foreign-aid effectiveness, this paper has provided new dimensions to the debate by investigating the aid-development nexus when existing institutional quality dynamics matter. Thus there has been a presumption here that certain institutional thresholds might be imperative for the institutional effectiveness of foreign-aid. Fourthly, this paper has integrated two of the three strands currently prevailing in the literature by putting some empirical structure on them, in order to give policymakers the much needed guidance. Fifthly, with 2015 drawing nigh it was momentous time to assess donors' objective of reaching the MDGs. In plainer terms, assessing the effectiveness of development assistance on institutions by virtue of the four points highlighted above (in the run-up to 2015) has provided crucial policy options to donor and multilateral agencies on their assistance impact.

The following hypotheses resulting from the broad literature review and positioning of the paper have been tested. (1) Are the institutional benefits of development-assistance contingent on existing levels of institutional quality **(**second strand)? (2)At what institutional thresholds will foreign-aid be instrumental in improving institutional quality (third strand)? (3) Are the institutional benefits of foreign-aid questionable until greater domestic institutional development has taken place (second and third strands)? Based on the weight of resulting empirical evidence, the following answers have been drawn from the tested hypotheses. (1) Institutional benefits of foreign-aid are contingent on existing institutional levels in Africa. (2) But for a thin exception, foreign-aid is instrumental in institutional development in bottom quantiles of government-quality distributions for the most part. (3) The institutional benefits of foreign-aid are not questionable until greater domestic institutional development has taken place. The reverse is true instead. Government quality benefits of development assistance are questionable in countries with existing high levels of institutional development. As a policy implication, blanket policies based on the aid-development nexus are unlikely to be appropriate; therefore policy measures should be contingent on prevailing levels of institutional development and tailored differently across best and worst countries in terms of institutional development.

Appendices

Appendix 1: Summary Statistics and Presentation of Countries

	Panel A: Summary Statistics					
	Variables	**Mean**	**S.D**	**Min.**	**Max.**	**Observations**
	Rule of Law	-0.454	0.626	-1.642	1.053	176
	Regulation Quality	-0.353	0.520	-1.431	0.905	176
	Government Effectiveness	-0.390	0.561	-1.539	0.807	176
Quality of	Political Stability	-0.381	0.874	-2.647	1.122	176
Government	Voice & Accountability	-0.424	0.743	-1.682	0.947	176
	Control of Corruption	-0.437	0.584	-1.466	1.086	176
	Democracy	3.767	4.179	-8.000	10.000	176
Development	Total DA	7.518	7.447	-0.251	52.823	176
Assistance	DA from Multilateral Donors	2.951	3.084	-0.235	13.246	176
(DA)	DA from DAC countries	4.527	4.709	-0.315	39.536	176
	Economic Prosperity(GDPg)	5.333	3.634	-3.653	20.613	176
Control	Per capita Economic Prosperity(GDPpcg)	3.139	3.361	-5.069	17.114	176
Variables	Population Growth	2.098	0.741	0.508	3.389	176
	Inflation	9.511	12.194	-1.050	108.90	176
	Public Investment	7.433	3.420	2.307	16.787	176
	Financial Openness(FDI)	3.483	3.594	-4.972	24.943	176
	Trade Openness(Trade)	77.422	38.732	32.683	209.41	176
	Autocracy	1.693	3.229	-8.000	9.000	176

Panel B: Presentation of Countries

Angola, Benin, Botswana, Cameroon, Ivory Coast, Egypt, Ethiopia, Ghana, Kenya, Lesotho, Mauritius, Morocco, Mozambique, Namibia, Rwanda, Senegal, South Africa, Sudan, Swaziland, Uganda, Zambia, Tanzania

S.D: Standard Deviation. Min: Minimum. Max: Maximum. FDI: Foreign Direct Investment. GDPg: GDP growth. GDPpcg: GDP per capita growth. DA: Development Assistance. DAC: Development Assistance Committee.

Appendix 2: Correlation Analysis

	Government Quality							Development Assistance			Control Variables								
RL	RQ	GE	PolS	V&A	CC	Demo	DA	DAMD	DADAC	FDI	Trade	GDPg	GDPpcg	Popg	Infl	Auto	PubIvt		
1.000	0.854	0.924	0.754	0.783	0.896	0.657	-0.196	-0.137	-0.217	0.044	0.168	-0.178	-0.073	-0.504	-0.180	-0.089	0.146	RL
	1.000	0.911	0.658	0.806	0.826	0.601	-0.256	-0.240	-0.243	-0.044	0.071	-0.233	-0.147	-0.435	-0.253	-0.194	-0.082	RQ
		1.000	0.722	0.821	0.918	0.674	-0.227	-0.179	-0.238	-0.019	0.092	-0.179	-0.077	-0.494	-0.170	-0.144	0.078	GE
			1.000	0.763	0.735	0.682	-0.088	-0.071	-0.087	0.084	0.353	-0.159	-0.086	-0.361	-0.117	-0.036	0.164	PolS
				1.000	0.731	0.840	-0.100	-0.094	-0.091	0.057	0.113	-0.181	-0.136	-0.241	-0.130	-0.426	-0.002	V&A
					1.000	0.596	-0.211	-0.145	-0.235	0.031	0.238	-0.232	-0.111	-0.590	-0.186	-0.120	0.165	CC
						1.000	-0.042	-0.018	-0.052	0.074	0.150	-0.052	-0.008	-0.202	0.032	-0.186	0.223	Demo
							1.000	0.928	0.970	0.084	-0.288	0.232	0.138	0.472	0.079	-0.090	-0.345	DA
								1.000	0.811	0.045	-0.235	0.227	0.146	0.418	0.071	-0.057	0.416	DAMD
									1.000	0.105	-0.299	0.214	0.120	0.471	0.080	-0.107	0.267	DADAC
										1.000	0.203	0.003	0.012	-0.035	0.480	-0.024	0.066	FDI
											1.000	-0.141	-0.023	-0.563	0.209	0.051	0.235	Trade
												1.000	0.977	0.345	0.248	0.200	0.177	GDPg
													1.000	0.139	0.218	0.237	0.194	GDPpcg
														1.000	0.189	-0.116	-0.036	Popg
															1.000	0.077	0.177	Inflation
																1.000	0.110	Auto
																	1.000	PubIvt

RL: Rule of Law. RQ: Regulation Quality. GE: Government Effectiveness. V&A: Voice & Accountability. CC: Corruption-Control. Demo: Democracy. FDI: Foreign Direct Investment. GDPg: GDP growth. GDPpcg: GDP per capita growth. Popg: Population growth. PubIvt: Public Investment. DA: Net Official Development Assistance. Auto: Autocracy. Inf: Inflation.

Appendix 3: Variable Definitions

Variables	Signs	Variable Definitions	Source
Rule of Law	RL	Rule of Law(estimate)	World Bank(WDI)
Regulation Quality	RQ	Regulation Quality (estimate)	World Bank(WDI)
Government Effectiveness	GE	Government Effectiveness(estimate)	World Bank(WDI)
Political Stability	PolS	Political Stability/ No Violence (estimate)	World Bank(WDI)
Voice & Accountability	V&A	Voice and Accountability (estimate)	World Bank(WDI)
Control of Corruption	CC	Control of Corruption(estimate)	World Bank(WDI)
Democracy	Demo	Level of Institutionalized Democracy	World Bank(WDI)
Development Assistance 1	DA	Total Development assistance(% of GDP)	World Bank(WDI)
Development Assistance 2	DAMD	Development Assistance from Multilateral Donors(% of GDP)	World Bank(WDI)
Development Assistance 3	DADAC	Development Assistance from DAC Countries (% of GDP)	World Bank(WDI)
External Debt Flow	FDI	Foreign Direct Investment(% of GDP)	World Bank(WDI)
Trade(Openness)	Trade	Imports plus Exports in commodities(% of GDP)	World Bank(WDI)
Population growth	Popg	Average annual population growth rate	World Bank(WDI)
Public Investment	PubIvt	Gross Public Investment(% of GDP)	World Bank(WDI)
Inflation	Infl	Consumer Price Index(annual %)	World Bank(WDI)
Economic Prosperity	GDPg	GDP Growth(annual %)	World Bank(WDI)
Autocracy	Auto	Level of Institutionalized Autocracy	World Bank(WDI)
Per Capita Economic prosperity	GDPpcg	GDP per capita Growth(annual %)	World Bank(WDI)

WDI: World Bank Development Indicators. GDP: Gross Domestic Product. DAC: Development Assistance Committee.

References

Addison, T., Mavrotas, G., & McGillivray, M., (2005), "Development Assistance and Development Finance: Evidence and Global Policy Agendas", *Journal of International Development*, 17, pp.819-836.

Alesina, A., & Dollar, D., (2000), " Who gives Foreign Aid to Whom and Why?" *Journal of Economic Growth*, 5, pp. 33-64.

Alesina, A., & Weder, B., (2002), "Do Corrupt Governments Receive Less Foreign Aid?" *American Economic Review*, 92, pp.1126-1137.

Asongu, S. A.,(2011), "Law, democracy and the quality of government in Africa", *MPRA Paper* No. 35502.

Asongu, S. A.,(2012a), "The political economy of development assistance: peril to government quality dynamics in Africa", *MPRA Paper* No. 36543.

Asongu, S. A.,(2012b), "Reversed economics and inhumanity of development assistance in Africa", *MPRA Paper* No. 36542.

Asongu, S. A.,(2012c), "Are financial benefits of financial globalization questionable until greater domestic financial development has taken place?", MPRA Paper No. 37631.

Billger, S. M., & Goel, R. K., (2009),"Do existing corruption levels matter in controlling corruption? Cross-country quantile regression estimates", *Journal of Development Economics*, 90, pp.299-305.

Boone, P.,(1996), "Politics and Effectiveness of Foreign Aid," *European Economic Review*, 40, pp.289-329.

Burnside, C., & Dollar, D., (1998), "Aid, the incentive regime and poverty reduction," *Policy Research Working Paper*, No. 1937, The World Bank.

Burnside, C., & Dollar, D., (2000), "Aid, Policies and Growth", *American Economic Review*, 90(4), pp.847-868.

Chenery, H. B., & Strout, A. M., (1966), "Foreign Assistance and Economic Development", *American Economic Review*, 56, pp. 679-733.

Clemens, M.A., Radelet, S., & Bhavnani, R., (2004), "Counting Chickens When They Hatch: the Short-Term Effect of Aid on Growth", *Center for Global Development Working Paper* No. 44.

Collier, P.,& Dollar, D., (2001), "Can the World Cut Poverty in Half? How Policy Reform and Effective Aid can Meet International Development Goals," *World Development*, 29(111), pp.1787-1802.

Collier, P., Hoeffler, A., & Pattillo, C.,(2001), "Flight Capital as a Portfolio Choice", *The World Bank Economic Review*, 15, pp. 55-80.

Commission for Africa(2005), "Our Common Interest: Report of the Commission for Africa", Blair Commission.

Dalgaard, C., & Hansen, H., (2001), "On Aid, Growth and Good Policies," *Journal of Development Studies*, 37, pp.17-41.

Devarajan, S., Miller, M., & Swanson, E., (2002), "Goals for Development: History, Prospects and Costs", *World Bank Policy Research Paper* No. 2819.

Dixit, A., (2004), *Lawlessness and Economics: Alternative Modes of Governance*. Princeton: University Press.

Djankov, S., Jose, G.M., Marta, R.,(2005), *"The Curse of Aid"*, World Bank, Mimeo, April, 2005.

Easterly, W.,(1999), "The Ghost of Financing Gap: Testing the Growth Model Used in the International Financial Institutions", *Journal of Development Economics*, 60, pp. 423-438.

Easterly, W.,(2005a), "Can foreign aid save Africa", Saint John's University.

Easterly, W., (2005b), " What did structural adjustment adjust? The association of policies and growth with repeated IMF and World Bank adjustment loans," *Journal of Development Economics*, 76, pp. 1-22.

Easterly, W, Levine, R., & Roodman, D., (2003), " New Data, New Doubts: A Comment on Burnside and Dollar's "Aid, Policies and Growth 2000'," *American Economic Review*, *NBER Working Paper*, No. 9846.

Feeny, S., (2003),"The impact of foreign aid on poverty and human well-being in Papua New Guinea", *Asia-Pacific Development Journal*, 10,(2).

Fielding, D., McGillivray, M., & Torres, S., (2006), " A Wider Approach to Aid Effectiveness: Correlated Impacts on Health, Wealth, Fertility and Education", The World Institute for Development Economics Research(UNU-WIDER).

Filmer, D., Hammer, J., & Pritchett, L., (2000), "Weak Links in the Chain: A Diagnosis of Health Policy in Poor Countries," *The World Bank Research Observer*, 15(2), pp.199-224.

Filmer, D & Pritchett, L.,(1997), "What Educational Production Functions Really Show: A Positve Theory of Education Spending", *World Bank Policy Research Paper*, No. 1795.

Ghura, D., Hadjimichael, M.T., Mahleisen, M., Nord, R., & Ucer, E.M., (1995), "Sub-Saharan Africa: Growth, Savings and Investment, 1986-93", IMF Occasional Paper No. 118.

Gomane, K., Morrissey, O., Mosley, P., & Verschoor, A., (2003), "Aid, pro-poor Government Spending and Welfare", CREDIT Working Paper 03/01.

Guillaumont, P., & Chauvet, L., (2001), "Aid and Performance: A Reassessment," *Journal of Development Studies*, 37, pp.66-92.

Hayek, F.A.,(1988), *The Fatal Conceit: The Errors of Socialism*, Edited by W.W. Bartley III, Chicago: University of Chicago Press.

Henry, P.B.,(2007), "Capital Account Liberalization: Theory, Evidence and Speculation", *Journal of Economic Literature*, XLV:887-935.

IMF (2005, June), "The IMF Approach to Promoting Good Governance and Combating Corruption-A Guide", International Monetary Fund.

Ishfaq, M.,(2004), "Aid effectiveness, debt capacity and debt management in the economy of Pakistan", a PhD dissertation at Quad-e-Azam University, Islamabad.

Knack, S., (2001), "Aid Dependence and the Quality of Governance: Cross-Country Empirical Tests", *Southern Economic Journal*, 68(2), pp.310-329.

Koenker, R., & Bassett, Jr. G.,(1978),"Regression quantiles", Econometrica, 46, pp.33-50.

Koenker, R., & Hallock, F.K.,(2001), "Quantile regression", *Journal of Economic Perspectives*, 15, pp.143-156.

Kose, M.A., Prasad, E. S., & Taylor, A.D.,(2011), "Threshold in the process of international financial integration", *Journal of International Money and Finance*, 30(1), pp.147-179.

Kraay, A., & Raddatz, C., (2005), "Poverty Traps, Aids and Growth", The World Bank.

Masud, N., & Yontcheva, B., (2005), "Does Foreign Aid Reduce Poverty? Empirical Evidence from Nongovernmental and Bilateral Aid", *IMF Working Paper*, 05/100.

Mosley, P., Hudson, J., & Horrell, S., (1992), "Aid, The Public Sector and The Market in Less Developed Countries: A Return to The Scene of Crime", *Journal of International Development*, 4, pp.139-150.

Mosley, P., Hudson, J., & Verschoor, A., (2004), "Aid, Poverty Reduction and the 'new' Conditionality", *Economic Journal*, 114, F217-F243.

Murphy, K., Shleifer, A., & Vishny, R., (1989), "Industrialization and the Big Push", *Journal of Political Economy*, 97(5), pp.1003-1026.

Okada, K., & Samreth, S.,(2012), "The effect of foreign aid on corruption: A quantile regression approach", *Economic Letters*, 11, pp.240-243.

Pedersen, K. P., (1996), "Aid, Investment and Incentives," *Scandinavian Journal of Economics*, 98(3), pp.423-438.

Prichett, L., & Woolcock, M., (2004), "Solutions When the Solution Is the Problem: Arraying the Disarray in Development", *World Development*, 32(2), pp.191-212.

Reichel, R., (1995), "Development, Aid, Savings and Growth in the 1980s: A Cross-Sectional Analysis," *Savings and Development*, 19(3), pp.279-296.

Rodrik, D., & Subramanian, A.,(2009), "Why did financial globalization disappoint?", *IMF Staff Papers*, 56(1), pp.112-138.

Rosenstein-Rodan, P.,(1943), "Problem of Industrialization in Eastern and South-Eastern Europe", *Economic Journal*, 53, pp.202–211.

Rostow, W.W., (1960), *The Stages of Economic Growth: A Non-Communist Manifesto*.

Sachs, J.D.,(2005), *The End of Poverty: Economic Possibilities for Our Time*, New York: The Penguin Press.

Svensson, J., (2000), "Foreign Aid and Rent-Seeking", *Journal of International Economics*, 51(2), pp. 437-461.

Van de Walle, N., (2001), *African Economics and the Politics of Permanent Crisis, 1979-1999*, Cambridge UK, Cambridge University Press 2001.