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# Does Globalization Promote Good Governance in Africa? An Empirical Study Across 51 countries

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#### **Abstract**

This study investigates the effect of globalisation on governance in 51 African countries for the period 1996-2011. Four bundled governance indicators and four globalisation (political, economic, social and general) variables are used. The empirical evidence is based on Instrumental Variable Quantile Regressions. The motivation for the estimation technique is that blanket governance-globalisation policies are not likely to succeed unless they are contingent on initial levels of governance and tailored differently across countries with low, intermediate and high levels of governance. The following findings are established. First, globalisation promotes good governance. Second, for the most part, the effect of globalisation is higher in terms of magnitude in the bottom quantiles of the political, institutional and general governance distributions. Third, the impact of globalisation is overwhelmingly higher in terms of magnitude in the top quantiles of the economic governance distribution.

Keywords: Africa; Governance; Globalization JEL Classifications: F10; F30; I30; O10; O55

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#### 1. Introduction

There are five main reasons for engaging this inquiry, namely: (i) growing levels of poverty in Africa, the role of good governance in the reduction of poverty and the influence of globalisation in the quality of institutions in developing countries; (ii) gaps and debates in the literature on the globalisation-governance nexus; (iii) evolving paradigms in the conception and measurement of governance and (iv) the need to account for initial levels of governance in the modelling exercise in order to provide more targeted policy implications.

First, poverty has been increasing in Africa since the 1990s. This was revealed by a 2015 World Bank report on Millennium Development Goals (MDGs) which established that extreme poverty has been decreasing in all regions of the world with the exception of Africa where, 45% of Sub-Saharan African countries were substantially off-track from reaching the MDG extreme poverty target (see Beegle et al., 2016; Asongu and Nwachukwu 2017a). This evidence of extreme poverty is in sharp contradiction with the narrative that for over two decades, Africa has been enjoying a growth resurgence (see Fosu 2015a, 44). Moreover, good governance has been documented to be instrumental in mitigating extreme poverty (Fosu 2015b, 2015c)<sup>1</sup> and the process of globalisation also influences the quality of governance in developing countries (Lalountas, Manolas and Varouras 2011; Asongu 2014a)<sup>2</sup>.

Some of the documented mechanisms via which globalisation influences nations' governance include the transmission of individual and social values that are associated with a plethora of interactions of nationalities and backgrounds (Jensen and Oster 2009; Berggren and Nilsson 2015). These values influence the orientation of individuals in leadership and could also affect how the perceptions of institutional and governance structures are shaped. Checks and balances between countries can also be shaped by globalisation such that, nations with less effective governance structures are assessed by other nations involved in bilateral or multilateral trade. Ultimately, such mutual oversight is transmitted to enhance governance structures among countries that are linked by mechanisms of globalisation. In addition, the growing technology that has been fuelling globalisation can enable countries with low levels

<sup>&</sup>lt;sup>1</sup> There is an abundant supply of literature on the linkage between good governance and inclusive development. Good governance is important in establishing strong foundations of social change (Efobi 2015) and raising standards of living through more effective management of economic resources (Fos u 2013; Anyanwu and Erhijakpor 2014; Fonchingong 2014).

<sup>&</sup>lt;sup>2</sup> According to Tchamyou (2016), globalisation is a process that is ineluctable and can only be neglected by jeopardizing the prosperity of nations.

of governance to catch-up their counterparts with higher levels of governance (Asongu and Nwachukwu 2016a). For example, corruption can be better managed via information exchange on corporations between countries and individuals with some track records of corruption.

Second, the globalisation-governance nexus is still subject to intense debate. Accordingly, in spite of the hypothesised positive effect of globalisation on governance standards, controversies are apparent in the literature on the role of globalisation in improving governance structures. For example, McMillan (2013) has established that institutional reforms in Africa have been driven by globalisation. The positive role of globalisation in governance has been established in a broad sample of developing (Lalountas, Manolas and Varouras 2011) and African (Asongu 2014a) countries. Conversely, with progress in technology that is driven by globalisation, poor governance has been observed to escalate because of growing networks of individuals and countries. These networks constitute complex webs of corruption that are hard to monitor (Goredema 2009; Shapiro and Levine 2015).

Third, the conception of governance has evolved in recent literature, especially with respect to the debate on the Washington Consensus (that prioritises political governance) versus the Beijing model (which prioritises economic governance) (see Asongu 2016a; Asongu and Ssozi 2016). On the one hand, the notion of governance has been used without a comprehensive conception and measurement. For example, "corruption-control" which is an aspect of institutional governance has been used by Kangoye (2013) as "governance". On the other hand, the concepts of institutional, political, economic and general governances have been used in the literature without a comprehensive measurement (Kaufman, Kraay, Mastruzzi 2007a, 2017b). This has resulted in conceptually flawed notions of governance and statistically falsifiable inferences. For example, it is conceptually inappropriate to use the term "economic governance" unless it translates a composite variable that is composed of government effectiveness and regulation quality. We address this conceptual shortcoming by using four bundled governance indicators, namely: institutional governance (consisting of the rule of law and corruption-control); economic governance (entailing regulation quality and government effectiveness); political governance (encompassing "voice and accountability" "political stability/non violence") and general governance (comprising institutional, economic and political governances). Hence, general governance is an embodiment of the six dimensions of governance.

Fourth, it is important to account for initial levels of governance in the assessment of the governance-globalisation nexus because blanket governance-globalisation policies are not very likely to be effective unless they are contingent on initial levels of governance and tailored differently across countries with low, intermediate and high levels of governance.

In the light of the above, this inquiry contributes to the literature by assessing the role of globalisation in governance. More comprehensive concepts of governance are employed, with particular emphasis on countries with low, intermediate and high levels of governance. The research question addressed is the following: how does globalisation affect governance when existing levels of governance matter? In order to address this question, two main methodological steps are considered. First, we use bundled concepts of governance by means of principal component analysis. Second, quantile regressions are employed which enable the study to assess the linkages throughout the conditional distributions of governance.

The rest of the study is structured as follows. Section 2 discusses the theoretical underpinnings and empirical evidence on the relationship between governance and globalisation. The data and methodology are covered in Section 3 while Section 4 presents the empirical results. Section 5 concludes with implications and future research directions.

#### 2. Theoretical underpinnings and empirical evidence

We discuss two main strands in this section, namely: (i) the nexus between governance and globalisation and (ii) factors connecting globalisation to governance which are engaged in three strands. The strands are discussed in chronological order.

First, with regard to the relationship between governance and globalisation, an important concern that is worthwhile to articulate is that globalisation affects the perceptions of governance within a country. According to Klitgaard (1988) and Asongu, Efobi and Tchamyou (2018), poor governance is very likely to be entrenched in the presence of monopolistic power which is often characterised with discretion and low accountability. Poor governance and mismanagement are not so apparent in countries in which economic incentives are the outcome of perfect competition. Under this scenario, poor governance can be reduced when economic operators depend on the discretions of some officials and/or when economic agents and governments operating monopolies are within strict rules of accountability (Asongu 2014a). It has also been documented that the protestant ethic, especially from a political perspective is generally linked to higher levels of governance (see

Bonaglia, Macedo and Bussolo 2001; Treisman 2000)<sup>3</sup>. Conversely, poor governance is more detrimental within the framework of federalism, when a country's democratic basis is less open, especially to international trade (Klitgaard 1998).

Second, with regard to factors connecting globalisation to governance, according to Bonaglia, Macedo and Bussolo (2001) and Krueger (1974), financial and trade globalisation could determine the equilibrium between benefits and costs, through a number of theoretical channels which we discuss in three main channels. The first mechanism emphasises rent-seeking activities that are caused by trade restrictions. Contrary to quotas, tariffs and some official permission, imports are associated with substantial economic rents owing to monopolistic powers that legal importers are endowed with. In attempts to share such rents, agents within an economy could either compete on legal terms or take part in illegal rent-seeking, smuggling, corruption, black market participation and bribery. It has been demonstrated by Krueger (1974) that such activities of rent-seeking could constraint some economic activities to evolve below optimal thresholds. This could also generate some differences between private and social costs and therefore, result in additional welfare costs, in addition to tariff restrictions. The seminal idea of Krueger was generalised in subsequent studies to a theory of tariffs (Bhagwati and Srinivasan 1980) and profit-motivated activities that are not productive (Bhagwati 1982).

The relationship between corruption and trade restrictions has been investigated by Gatti (1999). The author has disentangled two effects of inward-oriented corruption policies, namely: direct policy distortion and foreign competition. High barriers to international trade have a direct influence on the capacity of public officials to exchange "foreign competition and policy distortion" for bribes. Ultimately, this engenders low competition between domestic and foreign firms which is conducive for high rent-seeking, corruption and poor management.

The second strand on the competition-decreasing mechanism has been discussed by Ades and Di Tella (1999). They dispute that from specific and general perspectives, the degree of rent-seeking in markets affect aspects of poor governance. The authors have gone further to postulate that since variations in the level of rents are also traceable to the intensity competition, such competition should affect corruption in various ways. For instance, an

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<sup>&</sup>lt;sup>3</sup> The protestant ethic is generally more associated with liberalism, capitalism, private property rights and need hold the executive accountable (Asongu and Kodila-Tedika 2016). According to the narrative, Weber argued that capitalism in Northern Europe was fundamentally promoted by the desire for people to work in a more secular world: accumulating investment and wealth from the development of free enterprise and trade.

environment that is characterised with low competition (and hence, high rents) can increase the quantity of bribes obtained by bureaucrats. Conversely, within the same analytical framework, a country would receive more development rewards by augmenting the accounting and monitoring of its bureaucracy. According to the authors, it is important to compute the net effect of dimensions of poor governance (e.g. corruption). This is essentially because opposing tendencies are apparent. Nigeria is used by the authors to illustrate an eloquent example of how rent-seeking and corruption are associated. Accordingly, for more than three decades, approximately 75% of government revenue has been from petroleum exports (Nworu, 2017). During the same period, construction and import booms have been for the most part skewed in favour of elites from the ruling class. This nexus confirms a hypothetical connection between poor governance and rent-seeking.

A third mechanism that can link globalisation to governance takes into account of the costs incurred in overseeing public agents owing to growing international integration (see Wei 2000). The idea underpinning this channel is that the consolidation of institutional quality as well as its capacity to ameliorate the standards of governance considerably depends on resources that are meant for the purpose. In essence, if a country devotes more resources to the enhancement of existing institutions and/or construction of new ones, more positive externalities are feasible in terms of higher benefits and/or lower costs. Under the hypothesis that foreign investors (compared to their domestic counterparts) can more effectively channel their exports or investments between national markets, it is logical to infer that poor governance (e.g. corruption) is less detrimental to domestic transactions, compared to international transactions. The resulting differential effect of corruption motivates better incentives for improved governance. Therefore, compared to a country in autarky or isolation, a country that is open to the world is more likely to allocate more resources to enhance governance standards in the face of burgeoning globalisation.

In the light of the above, governance is more endogenous than globalization because globalization is largely an external or exogenous factor. This sequence is logical because globalization is more likely to influence national governance than national governance can influence globalization, especially governments of developing countries. The policy question addressed by this inquiry builds on gaps identified in two studies in the empirical literature that are closest to the present inquiry.

Lalountas, Manolas and Varouras (2011) have established that when confronted with globalisation, nations with higher income are comparatively more preoccupied with the

political and social dimensions of globalisation and therefore they enjoy positive externalities in terms of incentives for better measures in fighting corruption. On the other hand, countries with lower income are more concerned with the economic dimension of globalisation and therefore, the effect on corruption may be less apparent. Asongu (2014a) has confirmed the findings of Lalountas, Manolas and Varouras (2011) within a framework of African countries. This study extends this strand of the literature in three perspectives. First, we bundle six governance variables into four composite indicators in order to articulate an evolving paradigm in the conception of governance. Second, the empirical strategy is based on Instrumental Variable Quantile Regressions as opposed to Instrumental Variable Two Stage Least Squares used in the underlying literature (see Lalountas, Manolas and Varouras 2011; Asongu 2014a). This estimation technique enables the study to examine the governanceglobalisation nexus throughout the conditional distributions of governance. Therefore, this modelling approach articulates countries with low, intermediate and high levels of governance. Third, the conception of globalisation in the context of this study is more comprehensive and holistic because it incorporates political, economic, social and general dimensions of the phenomenon.

In the light of the above, this study extends the extant empirical literature by answering the following policy questions: how globalisation affects governance when existing levels of governance matter?

#### 3. Data and Methodology

#### **3.1 Data**

This study examines a panel of 51 African countries with data from La Porta, Lopez-de-Silanes, Shleifer and Vishny (2008), World Governance and World Development Indicators of the World Bank and Dreher, Gaston, Martens and Van Boxem (2010) for the period 1996-2011. The periodicity is chosen because of constraints in data availability. For instance, good governance measurements from the World Bank Governance indicators are only available from 1996 while the latest year for other variables is 2011. The dependent indicators are bundled into: economic governance (entailing regulation quality and government effectiveness); political governance (consisting of "voice and accountability" and political stability/non violence); institutional governance (comprised of the rule of law and corruption-control) and general governance. In Section 3.1.2 that follows, we discuss the bundling exercise which is done with principal component analysis.

The independent indicators are globalisation variables from Dreher, Gaston, Martens and Van Boxem (2010). They include the social, political, economic and general dimensions of globalisation. These globalisation indicators have been substantially employed in the literature (Figge and Martens 2014; Koosimile and Suping 2015; Asongu and Nwachukwu 2017a, 2017b). Selected control variables that are consistent with recent governance literature (Lalountas, Manolas and Varouras 2011; Asongu and Nwachukwu 2016b, 2016c) include: Gross Domestic Product (GDP) growth, foreign aid, public investment, inflation, middle income and English common law. The first-four are from World Bank Development indicators. Dummy variables on legal origins and income levels are respectively obtained from La Porta, Lopez-de-Silanes, Shleifer and Vishny (2008, p. 289) and the World Bank stratification of income categories<sup>4</sup>. Consistent with the literature, we expect economic prosperity in terms of GDP growth to influence governance positively because countries with high incomes are traditionally linked with better structures of governance (Asongu and Nwachukwu 2016b). Consistent with the same authors, high inflation can reduce standards of governance because it could be associated with inter alia: (i) disrespect of the rule of law; (ii) high levels of corruption in order to compensate for reduced purchasing power and (iii) political instability.

The impacts of development assistance and public investment are debatable. The impact of public investment on governance depends on among others: the type of governance variable and the manner in which disbursed funds are managed. For example, funds that are allocated to provide public commodities could enhance economic governance. Meanwhile, if the disbursement of corresponding funds is related to corruption and mismanagement, it is very likely that the impact on institutional governance will be negative. On the perspective of foreign aid, while Okada and Samreth (2012) have concluded that it has a positive nexus with corruption in a broad sample of developing countries, Asongu and Nwachukwu (2016c) have established negative effects between development assistance and the six governance indicators from Kaufman, Kraay, Mastruzzi (2011). English common law countries (compared with French civil law nations) are associated with higher levels of governance (La Porta, Lopez-de-Silanes, Shleifer and Vishny 1998, 1999; Djankov, La Porta, Lopez-de-

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<sup>&</sup>lt;sup>4</sup> There are four main World Bank income groups: (i) high income, \$12,276 or more; (ii) upper middle income, \$3,976-\$12,275; (iii) lower middle income, \$1,006-\$3,975 and (iv) low income, \$1,005 or less.

Silanes and Shleifer 2003) while higher income countries in Africa (compared with their low income counterparts) enjoy better levels of governance (Asongu, 2012).

The definitions and sources of variables are disclosed in Appendix 1, the summary statistics in Appendix 2 whereas Appendix 3 provides the correlation matrix. From Appendix 3, it is apparent that some of the control variables are not employed because of multicollinearity issues or high degrees of substitution. The unused control variables are: mobile phone penetration; secondary school enrolment and population growth.

#### 3.2 Methodology

#### 3.2.1 Principal Component Analysis (PCA)

Consistent with the motivation on the need to employ composite measurements of institutional quality, we use PCA in order to bundle the six governance indicators form Kaufman, Kraay, Mastruzzi (2011) into four composite variables, namely: general, political, institutional, economic governances. The technique which has been used in recent African governance literature (Asongu and Nwachukwu 2016b) is a statistical method that is employed to reduce a set of highly correlated variables into a smaller set of indicators that are uncorrelated and called principal components (PCs). The PCs represent a substantial variation of information in the combined constituent indicators.

The Jolliffe (2002) and Kaiser (1974) criterion is employed to retain common factors. According to the criterion, only common factors which have an eigenvalue greater than the mean should be retained. As apparent in Table 1, the eigenvalue corresponding to General Governance (G.Gov) is 4.787, representing approximately 79% of the total information in the six governance variables. In the same vein, economic governance (Ecogov), political governance (Polgov) and institutional governance (Instgov) have eigenvalues (respectively total variations) of 1.863, 1.647 and 1.867 (93.1%, 82.3% and 93.3%). In essence: (i) political governance (which comprises political stability/non-violence) is the election and replacement of political leaders; (ii) economic governance (entailing government effectiveness and regulation quality) is the formulation and implementation of policies that deliver public commodities and (iii) institutional governance (consisting of corruption-control and the rule of law) is the respect by citizens and the State of institutions that govern interactions between them.

Table 1: Principal Component Analysis (PCA) for Governance (Gov)

Principal		Com	ponent M	latrix(Loa	dings)		Proportion	Cumulative	Eigen
Components								Proportion	Value
	VA	PS	RQ	GE	RL	CC			
First PC (G.Gov)	0.385	0.370	0.412	0.426	0.440	0.412	0.797	0.797	4.787
Second PC	0.093	0.850	-0.364	-0.343	0.007	-0.140	0.072	0.870	0.437
Third PC	0.862	-0.179	0.122	-0.192	-0.182	-0.373	0.058	0.929	0.353
First PC (Polgov)	0.707	0.707					0.823	0.823	1.647
Second PC	-0.707	0.707					0.176	1.000	0.352
First PC (Ecogov)			0.707	0.707			0.931	0.931	1.863
Second PC			-0.707	0.707			0.068	1.000	0.137
First PC (Instgov)					0.707	0.707	0.933	0.933	1.867
Second PC					-0.707	0.707	0.066	1.000	0.132

P.C: Principal Component. VA: Voice & Accountability. RL: Rule of Law. R.Q: Regulation Quality. GE: Government Effectiveness. PS: Political Stability. CC: Control of Corruption. G.Gov (General Governance): First PC of VA, PS, RQ, GE, RL & CC. Polgov (Political Governance): First PC of VA & PS. Ecogov (Economic Governance): First PC of RQ & GE. Instgov (Institutional Governance): First PC of RL & CC.

Some concerns have been documented on the quality of indicators obtained from initial regressions (see Asongu and Nwachukwu 2016b). The issues raised are centred on the consistency, efficiency and inferential validity of estimated coefficients derived from second-stage regressions. In accordance with Pagan (1984, 242), while *two-step* estimators produce efficient and consistent estimates, they do not produce many valid inferences. The issues on inferential validity have also been documented in a broad strand of contemporary literature on the subject (see Oxley and McAleer 1993; McKenzie and McAleer 1997; Ba and Ng 2006; Westerlund and Urbain 2013a).

With regards to the PC-framework of this inquiry, Westerlund and Urbain (2015, 2013b) have built on previous studies (Pesaran 2006; Stock and Watson 2002; Bai 2003; Bai 2009; Greenaway-McGrevy Han and Sul 2012) to conclude that PC-augmented regressions can engender normal inferences in as much as estimated coefficients converge to their real values at the following rate:  $\sqrt{NT}$ , (where T is the number of time series and N denotes the number of cross-sections). According to the authors, in order for such convergence to occur, T and N need to be sufficiently large. However, they do not explicitly disclose how "large should be large". Two concerns related to this merit emphasis in this study. On the one hand, it is not very feasible to extend N much further because almost all African countries have been engaged. On the other hand, extending T is also not very feasible for two main reasons: (i) 1996 cannot be discounted further as the starting year because good governance indicators

from the World Bank are only available from 1996 and (ii) the end year is 2011 because of constraints in data availability at the time of the study.

In addition to the above justifications that are related to data availability constraints, recent empirical literature has employed PC-augmented variables with far lower values of N and T than in the current study. These studies include: (i) Asongu (2016b) on MINT (Mexico, Indonesia, Nigeria and Turkey) and the BRICS (Brazil, Russia, India, China and South Africa) countries and (ii) Asongu and Nwachukwu (2016b) on MENA (Middle East and North Africa) countries

#### 3.2.2 Quantile regressions

In accordance with the motivation which is to assess the governance-globalisation relationship when existing levels of governance matter, the study is consistent with the literature on conditional determinants by employing a Quantile Regressions (QR) approach (Keonker and Hallock 2001; Billger and Goel 2009; Okada and Samreth 2012; Asongu 2013; Asongu et al., 2017). In essence, the QR method consists of examining the governance-globalisation nexus throughout the conditional distributions of governance.

The existing literature on the governance-globalisation relationship has focused on investigating the nexus at the conditional mean of governance (Lalountas, Manolas and Varouras 2011). While mean effects are relevant, we complement the underlying literature by employing an estimation technique that accounts for existing levels of governance. Moreover, studies emphasising mean effects by Ordinary Least Squares (OLS) are based on the assumption that the error terms are normally distributed. This assumption does not hold for the QR approach because the technique is not based on the assumption of normally distributed error terms. Therefore, the approach enables this study to assess the globalisation-governance relationship with specific emphasis on countries with low, intermediate and high levels of governance. This technique which is robust in the presence of outliers enables the assessment of parameter estimates at multiple points of the conditional distribution of governance (Koenker and Bassett 1978).

We address the concern of endogeneity by using an Instrumental Variable QR (IVQR). The instrumentation procedure for globalisation is in Eq. (1) below.

$$G_{i,t} = \alpha + \delta_i (G_{i,t-1}) + \varepsilon_{i,t} \quad , \tag{1}$$

where,  $G_{i,t}$ , is the globalisation indicator of country i at period t,  $\alpha$  is a constant,  $G_{i,t-1}$ , represents globalisation in country i at period t-1, and  $\varepsilon_{i,t}$  the error term. The instrumentation procedure consists of regressing the globalisation independent variables of interest on their first lags and then saving the fitted values that are subsequently used as the main independent variables in Eq. (2). The specifications are Heteroscedasticity and Autocorrelation Consistent (HAC) in standard errors. The  $\theta^{th}$  quantile estimator of governance is obtained by solving for the following optimization problem, which is presented without subscripts for simplicity in Eq. (2)

$$\min_{\beta \in \mathbb{R}^k} \left[ \sum_{i \in \{i: y_i \geq x_i''\beta\}} \theta \Big| y_i - x_{i'}\beta \Big| + \sum_{i \in \{i: y_i < x_i''\beta\}} (1 - \theta) \Big| y_i - x_{i'}\beta \Big| \right], \tag{2}$$

where  $\theta \in (0,1)$ . As opposed to OLS which is fundamentally based on minimizing the sum of squared residuals, with QR, the weighted sum of absolute deviations are minimised. For example, the 25<sup>th</sup> or 75<sup>th</sup> quartiles (with  $\theta$ =0.25 or 0.75 respectively) are assessed by approximately weighing the residuals. The conditional quantile of governance or  $y_i$  given  $x_i$  is:

$$Q_{y}(\theta/x_{i}) = x_{i'}\beta_{\theta} , \qquad (3)$$

where unique slope parameters are modelled for each  $\theta^{th}$  specific quantile. This formulation is analogous to  $E(y/x) = x_i \beta$  in the OLS slope where parameters are investigated only at the mean of the conditional distribution of governance. For the model in Eq. (3), the dependent variable  $y_i$  is a governance indicator while  $x_i$  contains a constant term, GDP growth, foreign aid, public investment, inflation, Middle income and Common law.

Although the merits for the use of instrumental variable QR have been stated, it is important to acknowledge that some weaknesses may exist in applying this approach. For example, in the instrumental variable empirical strategy, it is assumed that there are zero correlations between the outcome variable and the instrument. While under linearity, such assumptions of zero correlations are plausible, with non-linear models (like the case of QR) such projections do not hold. This study is not irremediably damaged by this weakness. Moreover, the findings can still be useful for policy because the instrumental variable specification is not specified such that there is an assumption that the instruments do not influence the outcome variable. We have employed a step-wise estimation strategy. Within

this framework, the fitted or instrumented variables are first derived and saved before being used as the independent variables of interest in the main equation. It is important to note that the underlying assumption (.i.e. of zero correlations between instruments and dependent variables) is more relevant when the specification of a model requires the following variables to be clearly articulated: (i) dependent; (ii) endogenous explaining and (iii) instrumental variables. An example of a model that requires the underlying identification process for proper specification is the Generalised Method of Moments.

#### 4. Empirical results

Tables 2, 3, 4 and 5 respectively present findings corresponding to political governance, economic governance, institutional governance and general governance. Each table is presented in four panels: the first-two on the top present "political globalisation"- and "economic globalisation"-related regressions in respectively the left-hand-side and right-hand-side. Consistent differences in globalisation estimated coefficients between OLS and quintiles (in terms of sign, significance and magnitude of significance) justify the relevance of adopted empirical strategy.

The following findings can be established from Table 2 on the relationship between political governance and globalisation dynamics. First, globalisation positively affects political governance. Second, the effect of globalisation is higher in terms of magnitude in the bottom quantiles of the governance distribution, compared to top quantiles, with a thin exception of top quantiles in "political globalisation"-related regressions in the top-left-hand-side that are not significant. Third, the significant control variables have the expected signs.

The following findings can be established from Table 3 on the nexus between economic governance and globalisation dynamics. First, globalisation has a positive influence on economic governance. Second, the effect of globalisation is higher in terms of magnitude in the top quantiles of the governance distribution, compared to bottom quantiles, with a thin exception of top quantiles in "social globalisation"-related regressions in the bottom-left-hand-side for which the distinction is not apparent. Third, most of the significant control variables have the expected signs.

The following findings can be established from Table 4 on the effect of globalisation dynamics on institutional governance. First, globalisation has a positive effect on institutional governance for the most part. Second, the effect of globalisation is higher in terms of magnitude in the bottom quantiles of the institutional governance distribution, compared to

top quantiles. There is a small exception of "economic globalisation"-related regressions in the top- right-hand-side for which estimates are not significant in the bottom quantiles. Third, most the significant control variables have the expected signs.

Table 2: Political governance and globalisation

				Depe	ndent var	riable: Poli	tical Gove	rnance In	dex				
		Politic	al Globali	sation (Po	olglob)			Econor	mic Globa	lisation (	Ecoglob)		
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	
Constant	-1.260***	-2.26***	-2.24***	-1.70***	-0.098	-0.65***	-1.92***	-3.15***	-2.90***	-2.46***	-1.51***	-0.039	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.747)	(0.009)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.896)	
Polglob(IV)	0.006** (0.033)	0.010** (0.027)	0.010*** (0.001)	0.012*** (0.000)	-0.005 (0.170)	-0.005 (0.206)							
Ecoglob (IV)		(0.027)	(0.001)		(0.170)	(0.200)	0.023***	0.026***	0.019*	0.032***	0.025***	0.010*	
<i>y</i> , ,							(0.000)	(0.008)	(0.063)	(0.000)	(0.000)	(0.051)	
GDP growth	0.0008	0.018	0.010	-0.010	0.004	0.014	-0.002	0.009	0.003	0.013	0.012	0.011	
	(0.937)	(0.270)	(0.487)	(0.305)	(0.693)	(0.149)	(0.852)	(0.559)	(0.907)	(0.457)	(0.360)	(0.260)	
Foreign aid	0.012	0.007	0.008	0.019***	0.015**	-0.020***	0.008	0.006	0.021	0.012	-0.007	-0.022***	
Public	(0.141) <b>0.058***</b>	(0.487) 0.040	(0.319) <b>0.044</b> **	(0.008) 0.035***	(0.021) 0.100***	(0.002) 0.137***	(0.327) <b>0.086***</b>	(0.527) <b>0.051**</b>	(0.149) <b>0.079**</b>	(0.214) <b>0.081***</b>	(0.337) <b>0.136***</b>	(0.001) 0.150***	
Investment	0.020	0.040	0.044	0.055	0.100	0.137	0.000	0.021	0.075	0.001	0.120	0.120	
	(0.001)	(0.130)	(0.010)	(0.009)	(0.000)	(0.000)	(0.000)	(0.040)	(0.012)	(0.000)	(0.000)	(0.000)	
Inflation	-0.00006	-0.000	-0.00003	-0.00006	-0.00008	-0.00008	-0.00005	0.000	-0.00002	-0.00004	-0.00005	-	
	***		***	***	***	***	***			***	***	0.00008**	
	(0.000)	(0.722)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.837)	(0.122)	(0.000)	(0.000)	(0.000)	
Middle Income	0.391*** (0.006)	0.110 (0.602)	0.429*** (0.002)	0.614*** (0.000)	0.539*** (0.001)	0.361* (0.068)	0.240 (0.123)	-0.196 (0.343)	0.249 (0.303)	0.571*** (0.005)	0.285 (0.118)	0.245 (0.163)	
Common law	0.854***	0.778***	0.937***	1.081***	1.066***	0.695***	0.635***	0.641***	1.048***	0.656***	0.553***	0.488***	
Consider taw	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	(0.000)	(0.001)	
R²/Pseudo R²	0.157	0.057	0.097	0.106	0.125	0.186	0.229	0.112	0.114	0.148	0.172	0.212	
Fisher	18.03***						27.42***						
Observations	449	449	449	449	449	449	420	420	420	420	420	420	
	OLS	Socia Q.10	l Globalis Q.25	ation (Soc Q.50	eglob) Q.75	Q.90	General Globalisation (Glob) OLS Q.10 Q.25 Q.50 Q.75 Q.90						
Constant	-2.648***	-3.890***	Q.23	Q.50	Q.73	-0.666***	OES	Q.10	Q.25	<b>Q</b> .50	Q.73	-0.738**	
Constant	-2.040	-3.090	3.372***	2.655***	2.203***	-0.000	3.065***	4.758***	4.169***	2.952***	2.197***	-0.730	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.007)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.048)	
Socglob(IV)	0.070***	0.080***	0.072***	0.062***	0.067***	0.041***							
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)							
Glob (IV)							0.054***	0.070***	0.061***	0.048***	0.046***	0.025***	
GDP growth	0.022**	0.018*	0.025*	0.013	0.014	0.014	( <b>0.000</b> ) 0.008	(0.000) 0.026**	( <b>0.000</b> ) 0.011	( <b>0.000</b> ) 0.005	( <b>0.000</b> ) -0.003	( <b>0.001</b> ) 0.0004	
GD1 glowth	(0.023)	(0.069)	(0.075)	(0.267)	(0.117)	(0.170)	(0.382)	(0.038)	(0.313)	(0.566)	(0.824)	(0.958)	
Foreign aid	0.020***	0.013***	0.020**	0.026***	0.033***	-0.012*	0.019**	0.011	0.024***	0.025***	0.012	-0.018**	
Ü	(0.009)	(0.006)	(0.038)	(0.000)	(0.000)	(0.050)	(0.032)	(0.489)	(0.003)	(0.000)	(0.141)	(0.012)	
Public	0.055***	0.045***	0.041**	0.038***	0.074***	0.148***	0.058***	0.028	0.049***	0.037***	0.094***	0.159***	
Investment	(0.000)	(0.000)	(0.040)	(0.00 <b>=</b> )	(0.000)	(0.000)	(0.000)	(0.4.42)	(0.004)	(0.000)	(0.000)	(0.000)	
To Carling	(0.000) -0.00006	(0.000)	(0.010)	(0.005) -0.00006	(0.000)	(0.000)	(0.000)	(0.143)	(0.001) -0.00003	(0.002)	(0.000)	(0.000) -0.00009	
Inflation	-U.UUUU0 ***	-0.00001 ***	-0.00003 ***	-U.UUUU0 ***	-0.00009 ***	-0.00009 ***	-0.00006 ***	-0.00001 **	-0.00003 ***	-0.00006 ***	-0.00008 ***	-0.00009 ***	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.041)	(0.000)	(0.000)	(0.000)	(0.000)	
Middle Income	-0.381***	-0.692***	-	0.165	-0.210	-0.425***	0.026	-0.477**	0.020	0.373***	0.071	0.037	
			0.572***										
	(0.006)	(0.000)	(0.003)	(0.290)	(0.127)	(0.006)	(0.863)	(0.037)	(0.883)	(0.003)	(0.721)	(0.843)	
Common law	0.412***	0.305***	0.400***	0.707***	0.598***	0.302**	0.556***	0.647***	0.667***	0.778***	0.602***	0.516***	
	(0.000)	(0.003)	(0.009)	(0.000)	(0.000)	(0.013)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	
R²/Pseudo R²	0.356	0.269	0.215	0.209	0.204	0.223	0.266	0.180	0.168	0.158	0.158	0.193	
Fisher	63.72***	440	140	440	440	440	37.85***	440	440	440	440	440	
Observations	449	449	449	449	449	449	449	449	449	449	449	449	

\*\*\*,\*\*,\*: significance levels of 1%, 5% and 10% respectively. OLS: Ordinary Least Squares.  $R^2$  (Pseudo  $R^2$ ) for OLS (Quantile Regressions). Lower quintiles (e.g., Q 0.1) signify nations where governance is least. IV: Instrumented Variable. Contrary to quantile

 $regressions, OLS \ are \ based \ on \ the \ mean \ values \ of \ the \ outcome \ variable. Including \ OLS \ estimates \ is \ therefore \ to \ compare \ estimates \ based \ on \ mean \ values \ of \ the \ outcome \ variable \ with \ estimates \ based \ on \ the \ conditional \ distribution \ of \ the \ dependent \ variable.$ 

Table 3: Economic governance and globalisation

				Dep	endent va	riable: E	conomic (	Governanc	ce Index			
		Politic	al Globali	isation (P	olglob)			Econo	omic Glob	alisation	(Ecoglob)	
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
Constant	- 1.619*** (0.000)	- 2.057*** (0.000)	- 2.089*** (0.000)	- 1.820*** (0.000)	- 0.651*** (0.000)	0.051 (0.758)	-0.197	- 1.032*** (0.000)	- 0.846*** (0.000)	- 0.955*** (0.004)	0.158 (0.537)	0.577*** (0.000)
Polglob(IV)	0.020*** (0.000)	0.012*** (0.000)	0.014*** (0.000)	0.016*** (0.000)	0.021*** (0.000)	0.016*** (0.000)						
Ecoglob (IV)							0.002 (0.677)	-0.008* (0.077)	-0.006 (0.189)	0.016** (0.023)	0.017*** (0.002)	0.015*** (0.000)
GDP growth	0.007 (0.337)	0.008 (0.254)	0.002 (0.730)	0.007 (0.593)	-0.008 (0.220)	0.001 (0.834)	0.011 (0.295)	0.011 (0.306)	0.005 (0.620)	0.022 (0.146)	0.029**	0.006 (0.327)
Foreign aid	0.009	-0.0009	-0.0008	0.026***	0.019***	0.007*	-0.002	-0.011**	-0.005	0.008	0.028***	0.017***
Public Investment	(0.218) - <b>0.020</b> **	(0.792) -0.012	(0.858) 0.008	( <b>0.002</b> ) -0.023	(0.000) - 0.055***	(0.054) -0.047 ***	(0.723) - <b>0.027</b> **	( <b>0.019</b> ) 0.013	(0.370) 0.009	(0.373) - <b>0.039</b> *	(0.000) -0.114***	-0.075***
Inflation	(0.039) -0.00006 ***	(0.134) -0.0002 ***	(0.325) - <b>0.00002</b> ***	(0.144) - <b>0.00004</b> ***	(0.000) -0.00009 ***	(0.000) -0.00009 ***	(0.043) -0.00005 ***	(0.297) - <b>0.0002</b> ***	(0.504) -0.00002 ***	(0.061) -0.00003 ***	(0.000) -0.00007 ***	(0.000) -0.00008 ***
Middle Income	(0.000) 0.274**	( <b>0.000</b> ) 0.078	(0.000) 0.204***	(0.000) 0.619***	(0.000) 0.376***	(0.000) 0.387***	( <b>0.000</b> ) 0.179	( <b>0.000</b> ) -0.095	( <b>0.000</b> ) 0.052	( <b>0.000</b> ) 0.288	(0.000) 0.450***	(0.000) 0.544***
Common law	(0.011) 1.166*** (0.000)	(0.201) 1.421*** (0.000)	(0.005) 1.277*** (0.000)	(0.000) 1.101*** (0.000)	(0.000) 0.964*** (0.000)	(0.000) 0.761*** (0.000)	(0.106) 1.037*** (0.000)	(0.211) 1.591*** (0.000)	(0.644) 1.367*** (0.000)	(0.121) <b>0.924***</b> ( <b>0.000</b> )	(0.001) 0.443*** (0.001)	(0.000) 0.459*** (0.000)
R <sup>2</sup> /Pseudo R <sup>2</sup> Fisher	0.392 <b>52.71</b> ***	0.321	0.310	0.212	0.208	0.270	0.275 <b>31.82***</b>	0.282	0.253	0.134	0.159	0.233
Observations	449	449	449	449	449	449	420	420	420	420	420	420
		Socia	l Globalis	ation (Soc	cglob)			Gei	neral Glol	palisation	(Glob)	
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
Constant	-	-	-	-	-	0.063	-		-	-	-1.854***	-0.720***
	1.654***	2.465***	2.149***	1.921***	0.886***		2.356***	2.144***	2.653***	3.171***		
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.644)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Socglob(IV)	0.056*** (0.000)	0.051*** (0.000)	0.049*** (0.000)	0.053*** (0.000)	0.058*** (0.000)	0.032*** (0.000)						
Glob (IV)							0.051***	0.021***	0.038***	0.061***	0.059***	0.044***
							(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
GDP growth	0.019**	0.015	0.010*	0.028***	0.013	0.004	0.010	0.010	0.012	0.019	0.004	0.0005
	(0.010)	(0.100)	(0.063)	(0.003)	(0.132)	(0.490)	(0.182)	(0.193)	(0.117)	(0.139)	(0.683)	(0.911)
Foreign aid	0.010	0.001	-0.0007	0.025***	0.025***	0.024***	0.010	-0.001	-0.0001	0.024***	0.031***	0.020***
	(0.134)	(0.704)	(0.864)	(0.000)	(0.000)	(0.000)	(0.175)	(0.769)	(0.981)	(0.003)	(0.000)	(0.000)
Public	- 0.027***	- 0.032***	-0.015**	- 0.038***	- 0.061***	- 0.050***	-0.024**	-0.014	0.008	-0.020	-0.068***	-0.055***
Investment	(0.001)	(0.032***	(0.012)	(0.000)	(0.000)	(0.001)	(0.018)	(0.108)	(0.314)	(0.178)	(0.000)	(0.000)
Inflation	-0.00006 ***	-0.00001 ***	-0.00003 ***	-0.00005 ***	-0.00008 ***	-0.00009 ***	-0.00006 ***	-0.0001 ***	-0.00002 ***	-0.00004 ***	0.00007***	-0.00009 ***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Middle	-	-0.027	-	-0.289**	-	0.219***	-0.110	0.080	-0.071	0.117	0.272**	0.036
Income	0.375***		0.266***		0.517***							
	(0.000)	(0.837)	(0.000)	(0.019)	(0.000)	(0.005)	(0.288)	(0.274)	(0.446)	(0.453)	(0.033)	(0.549)
Common law	0.793*** (0.000)	0.915*** (0.000)	1.068*** (0.000)	0.969*** (0.000)	0.564*** (0.000)	0.747*** (0.000)	0.859*** (0.000)	1.269*** (0.000)	1.132*** (0.000)	0.909*** (0.000)	0.316** (0.017)	0.439*** (0.000)
R <sup>2</sup> /P seudo R <sup>2</sup> Fisher	0.468 <b>70.33***</b>	0.369	0.374	0.297	0.231	0.256	0.437 <b>68.38***</b>	0.302	0.312	0.272	0.235	0.296
Observations	449	449	449	449	449	449	449	449	449	449	449	449

\*\*\*,\*\*,\*: significance levels of 1%, 5% and 10% respectively. OLS: Ordinary Least Squares. R² (Pseudo R²) for OLS (Quantile Regressions). Lower quintiles (e.g., Q 0.1) signify nations where governance is least. IV: Instrumented Variable. Contrary to quantile regressions, OLS are based on the mean values of the outcome variable. Including OLS estimates is therefore to compare estimates based on mean values of the outcome variable with estimates based on the conditional distribution of the dependent variable.

Table 4: Institutional governance and globalisation

				Depend	ent variab	ole: Institu	utional G	overnance	e Index			
		Politica	al Globali	sation (Po	olglob)			Econon	nic Global	isation (E	coglob)	
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
Constant	-1.808***	3.804***	2.953***	- 1.908***	- 0.765***	0.986***	1.675***	- 1.889***	- 1.856***	- 1.947***	- 1.401***	-0.556**
Polglob(IV)	(0.000) 0.012***	(0.000) 0.031***	(0.000) 0.023***	(0.000) 0.016***	( <b>0.004</b> ) 0.002	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.049)
Folglob(IV)						0.010***						
Ecoglob (IV)	(0.000)	(0.000)	(0.000)	(0.000)	(0.539)	(0.000)	0.011*	-0.005	-0.002	0.012***	0.023***	0.014**
Ecoglob (IV)							(0.071)	(0.573)	(0.669)	(0.006)	(0.000)	(0.013)
GDP growth	-0.004	0.020	-0.005	-0.015	0.012	0.017**	0.002	0.009	0.010	0.033**	0.026**	0.042**
F	(0.776)	(0.209)	(0.766)	(0.116)	(0.202)	(0.024)	(0.871)	(0.769)	(0.589)	(0.016)	(0.049)	(0.004)
Foreign aid	0.011	0.010	0.007	0.012*	-0.011*	0.002	-0.001	-0.001	-0.004	-0.007	0.018***	0.027**
D., bli .	(0.199)	(0.378)	(0.523)	(0.056)	(0.051)	(0.518)	(0.829)	(0.930)	(0.562)	(0.367)	(0.007)	(0.000)
Public Investment	0.053**	0.042**	0.063***	0.048***	0.108***	0.043***	0.102***	0.100***	0.119***	0.103***	0.116***	0.101**
Inflation	(0.012) -0.0001	(0.028) -0.00002	(0.006) -0.00005	(0.000) -0.00009	(0.000) -0.00008	(0.000) -0.0001	(0.000) -0.00007	(0.004) -0.0004	(0.000) -0.00004	(0.000) -0.00004	(0.000) -0.00007	(0.000) -0.00009
	*** (0.000)	*** (0.003)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)	*** (0.000)
Middle Income	0.836***	0.028	0.085	0.970***	1.478***	1.325***	0.789***	-0.081	0.584***	0.938***	1.032***	1.150**
	(0.000)	(0.850)	(0.632)	(0.000)	(0.000)	(0.000)	(0.000)	(0.744)	(0.000)	(0.000)	(0.000)	(0.000)
Common law	0.932*** (0.000)	0.223** (0.025)	0.595*** (0.000)	0.816*** (0.000)	0.691*** (0.000)	0.912*** (0.000)	0.736*** (0.000)	0.672*** (0.002)	0.973*** (0.000)	0.514*** (0.001)	0.332** (0.028)	0.588** (0.000)
R²/Pseudo R² Fisher	0.255 <b>31.57</b> ***	0.122	0.130	0.144	0.214	0.344	0.325 33.57***	0.092	0.165	0.186	0.265	0.370
Observations	449	449	449	449	449	449	420	420	420	420	420	420
		Social	l Globalis	ation (Soc	eglob)			Gene	ral Globa	lisation (	Glob)	
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
Constant	-3.192***	-	-	-	-	-	-3.717	-4.202	-4.462	-	-	-
		3.592***	3.533***	3.285***	2.812***	1.939***	***	***	***	3.639***	3.383***	1.915**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Socglob(IV)	0.087*** (0.000)	0.079*** (0.000)	0.084*** (0.000)	0.085*** (0.000)	0.085*** (0.000)	0.083*** (0.000)						
Glob (IV)							0.067***	0.057***	0.073***	0.063***	0.066***	0.038**
							(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
GDP growth	0.020*	0.022	0.024	0.010	0.022*	0.012	0.004	0.012	0.007	-0.006	-0.004	0.010
	(0.098)	(0.273)	(0.161)	(0.178)	(0.073)	(0.391)	(0.741)	(0.476)	(0.571)	(0.694)	(0.651)	(0.415)
Foreign aid	0.020** (0.018)	0.016 (0.215)	0.019* (0.068)	0.016*** (0.001)	0.009 (0.206)	-0.001 (0.853)	0.018* (0.062)	0.004 (0.726)	0.021** (0.020)	0.027*** (0.009)	0.024*** (0.000)	0.015** (0.028)
Public	0.047***	0.014	0.019	0.072***	0.098***	0.089***	0.051***	0.046**	0.020)	0.047**	0.096***	0.102**
Investment	*****	*****	*****	****		*****	*****		*****			
	(0.003)	(0.495)	(0.257)	(0.000)	(0.000)	(0.000)	(0.002)	(0.025)	(0.027)	(0.014)	(0.000)	(0.000)
Inflation	-0.00009	-0.00005	-0.00006	-0.00009	-0.00009	-0.0001	-0.00009	-0.0008	-0.00006	-0.00008	-0.0001	-0.0001
	***	***	***	***	***	***	***	***	***	***	***	***
Middle Income	( <b>0.000</b> ) -0.133	(0.000) -0.394**	( <b>0.000</b> ) -0.185	(0.000) -0.247**	( <b>0.000</b> ) 0.169	( <b>0.000</b> ) 0.213	(0.000) 0.370**	(0.000) -0.316*	( <b>0.000</b> ) 0.198	(0.000) 0.531***	(0.000) 0.666***	(0.000) 1.167**
	(0.290)	(0.031)	(0.308)	(0.016)	(0.319)	(0.262)	(0.010)	(0.098)	(0.169)	(0.009)	(0.000)	(0.000)
Common law	0.377*** (0.000)	0.243** (0.040)	0.288** (0.038)	0.502*** (0.000)	0.136 (0.384)	0.081 (0.642)	0.554*** (0.000)	0.580*** (0.000)	0.410*** (0.000)	0.497*** (0.007)	0.429*** (0.001)	0.739** (0.000)
R <sup>2</sup> /Pseudo R <sup>2</sup>	0.517	0.279	0.315	0.313	0.315	0.379	0.391	0.160	0.208	0.210	0.263	0.346
Fisher Observations	108.05***	440	440	440	440	440	61.37***	440	440	440	440	440
Observations	449	449	449	449	449	449	449	449	449	449	449	449

\*\*\*,\*\*,\*: significance levels of 1%, 5% and 10% respectively. OLS: Ordinary Least Squares. R² (Pseudo R²) for OLS (Quantile Regressions). Lower quintiles (e.g., Q 0.1) signify nations where governance is least. IV: Instrumented Variable. Contrary to quantile regressions, OLS are based on the mean values of the outcome variable. Including OLS estimates is therefore to compare estimates based on mean values of the outcome variable with estimates based on the conditional distribution of the dependent variable.

The following findings can be established from Table 5 on the effect of globalisation dynamics on general governance. First, globalisation has a positive effect on general

governance, for the most part. Second, the effect of globalisation is higher in terms of magnitude in the bottom quantiles of the general governance distribution, compared to top quantiles. A small exception is in "economic globalisation"-related regressions in the top-right-hand-side for which estimates are not significant in the bottom quantiles. Third, most the significant control variables have the expected signs.

Table 5: General governance and globalisation

				•		riable: Go	eneral Go	vernance				
			al Globali	,	0				mic Globa	`	0 ,	
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
Constant	- 2.638***	- 4.652***	- 3.688***	- 3.119***	- 1.041***	1.860***	- 2.529***	- 3.525***	- 2.830***	- 3.785***	-1.932***	-0.797**
Polglob(IV)	(0.000) 0.020***	(0.000) 0.032***	(0.000) 0.024***	(0.000) 0.027***	( <b>0.003</b> ) 0.006	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.019)
	(0.000)	(0.000)	(0.000)	(0.000)	(0.155)	0.017*** (0.000)						
Ecoglob (IV)							0.025** (0.014)	0.010 (0.514)	0.001 (0.888)	0.050*** (0.000)	0.037*** (0.000)	0.037*** (0.000)
GDP growth	0.001	0.033	-0.017	-0.010	0.017	0.009	0.006	0.007	0.003	0.051**	0.009	0.009
Foreign aid	(0.926)	(0.366) 0.001	(0.304) 0.014	(0.606) <b>0.035***</b>	(0.184)	(0.396) - <b>0.015</b> **	(0.777)	(0.850) 0.0001	(0.865)	( <b>0.015</b> ) -0.009	(0.632) - <b>0.030</b> ***	(0.555) -0.030***
Public Investment	(0.186) <b>0.075***</b>	(0.942) 0.045	(0.190) <b>0.055***</b>	(0.035) 0.048**	(0.104) <b>0.168***</b>	(0.010) 0.084***	(0.981) <b>0.131***</b>	(0.992) <b>0.118**</b>	(0.684) <b>0.122***</b>	(0.449) <b>0.155***</b>	(0.005) 0.193***	(0.000) 0.129***
Inflation	(0.007) -0.0001 ***	(0.399) - <b>0.0005</b> ***	(0.006) -0.0001 ***	(0.044) -0.0001 ***	(0.000) -0.0001 ***	(0.000) -0.0002 ***	(0.000) -0.0001 ***	(0.013) -0.0006 ***	(0.000) -0.00009 ***	(0.000) -0.00008 ***	(0.000) - 0.0001***	(0.000) - 0.0001***
Middle Income	(0.000) 0.975*** (0.000)	( <b>0.000</b> ) 0.027 (0.931)	(0.000) 0.651*** (0.000)	(0.000) 1.164*** (0.000)	(0.000) 1.548*** (0.000)	(0.000) 1.245*** (0.000)	(0.000) 0.813*** (0.000)	( <b>0.000</b> ) -0.269 (0.459)	(0.000) 0.636*** (0.002)	(0.000) 0.823*** (0.001)	(0.0001 (0.000) 1.131*** (0.000)	(0.000) 0.964*** (0.000)
Common law	1.492*** (0.000)	0.484** (0.049)	1.850*** (0.000)	1.372*** (0.000)	1.177*** (0.000)	1.467*** (0.000)	1.150*** (0.000)	0.883*** (0.008)	1.963*** (0.000)	0.931*** (0.000)	0.584*** (0.007)	0.687*** (0.000)
R <sup>2</sup> /Pseudo R <sup>2</sup> Fisher	0.245 <b>28.87</b> ***	0.091	0.160	0.137	0.173	0.342	0.293 <b>31.40</b> ***	0.084	0.163	0.157	0.226	0.366
Observations	449	449	449	449	449	449	420	420	420	420	420	420
		Social	l Globalis	otion (So	nglob)		•	Con	eral Globa	lication	(Clab)	
	OLS	Q.10	Q.25	Q.50	Q.75	Q.90	OLS	Q.10	Q.25	Q.50	Q.75	Q.90
											-	Z.,
Constant	- 4.515***	- 5.697***	- 5.144***	- 4.847***	- 3.885***	- 1.634***	- 5.472***	- 7.608***	6.243***	- 5.926***	-4.278***	-2.980***
	(0.000) 0.127***	(0.000) 0.126***	(0.000) 0.124***	(0.000) 0.123***	(0.000) 0.128***	(0.000) 0.072***	5.472*** (0.000)	- 7.608*** (0.000)	- 6.243*** (0.000)	5.926*** (0.000)	-4.278*** (0.000)	
Socglob(IV)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)  0.102***	(0.000)  0.112***	(0.000)  0.101***	(0.000)  0.104***	(0.000)  0.092***	-2.980*** (0.000)  0.064***
Socglob(IV) Glob (IV)	(0.000) 0.127*** (0.000)	(0.000) 0.126*** (0.000)	(0.000) 0.124*** (0.000)	(0.000) 0.123*** (0.000)	(0.000) 0.128*** (0.000)	(0.000) 0.072*** (0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	-2.980*** (0.000)  0.064*** (0.000) -0.026*
Socglob(IV) Glob (IV) GDP growth	(0.000) 0.127*** (0.000)  0.037**	(0.000) 0.126*** (0.000) 	(0.000) 0.124*** (0.000)  0.046**	(0.000) 0.123*** (0.000) 	(0.000) 0.128*** (0.000) 	(0.000) 0.072*** (0.000)  0.029*	(0.000)  0.102*** (0.000) 0.014	(0.000)  0.112*** (0.000) 0.027	(0.000)  0.101*** (0.000) 0.020	(0.000)  0.104*** (0.000) 0.009	(0.000)  0.092*** (0.000) -0.007	-2.980*** (0.000)  0.064*** (0.000)
Socglob(IV) Glob (IV) GDP growth Foreign aid	(0.000) 0.127*** (0.000)  0.037** (0.027) 0.029**	(0.000) 0.126*** (0.000)  0.035 (0.253) 0.028	(0.000) 0.124*** (0.000)  0.046** (0.016) 0.025*	(0.000) 0.123*** (0.000)  0.008 (0.625) 0.046***	(0.000) 0.128*** (0.000)  0.018 (0.289) 0.002	(0.000) 0.072*** (0.000)  0.029* (0.077) 0.011	(0.000) 0.102*** (0.000) 0.014 (0.409) 0.027*	(0.000)  0.112*** (0.000) 0.027 (0.317) 0.024	(0.000)  0.101*** (0.000) 0.020 (0.395) 0.036**	(0.000)  0.104*** (0.000) 0.009 (0.538) 0.061***	(0.000)  0.092*** (0.000) -0.007 (0.688) 0.007	-2.980*** (0.000) 0.064*** (0.000) -0.026* (0.077) 0.023**
Socglob(IV) Glob (IV) GDP growth Foreign aid Public Investment	(0.000) 0.127*** (0.000)  0.037** (0.027) 0.029** (0.016) 0.066***	(0.000) 0.126*** (0.000)  0.035 (0.253) 0.028 (0.156) 0.037	(0.000) 0.124*** (0.000)  0.046** (0.016) 0.025* (0.052) 0.038*	(0.000) 0.123*** (0.000)  0.008 (0.625) 0.046*** (0.000) 0.076***	(0.000) 0.128*** (0.000)  0.018 (0.289) 0.002 (0.839) 0.146***	(0.000) 0.072*** (0.000)  0.029* (0.077) 0.011 (0.246) 0.128***	(0.000)  0.102*** (0.000) 0.014 (0.409) 0.027* (0.055) 0.073***	(0.000) 0.112*** (0.000) 0.027 (0.317) 0.024 (0.285) 0.075***	(0.000) 0.101*** (0.000) 0.020 (0.395) 0.036** (0.024) 0.035	(0.000)  0.104*** (0.000) 0.009 (0.538) 0.061*** (0.000) 0.045**	(0.000) 0.092*** (0.000) -0.007 (0.688) 0.007 (0.523) 0.151***	-2.980*** (0.000) 0.064*** (0.000) -0.026* (0.077) 0.023** (0.011) 0.191***
Constant  Socglob(IV)  Glob (IV)  GDP growth  Foreign aid  Public Investment  Inflation  Middle Income	(0.000) 0.127*** (0.000)  0.037** (0.027) 0.029** (0.016) 0.066*** (0.001)	(0.000) 0.126*** (0.000)  0.035 (0.253) 0.028 (0.156) 0.037 (0.137)	(0.000) 0.124*** (0.000)  0.046** (0.016) 0.025* (0.052) 0.038* (0.085)	(0.000) 0.123*** (0.000)  0.008 (0.625) 0.046*** (0.000) 0.076*** (0.000)	(0.000) 0.128*** (0.000)  0.018 (0.289) 0.002 (0.839) 0.146*** (0.000)	(0.000) 0.072*** (0.000)  0.029* (0.077) 0.011 (0.246) 0.128*** (0.000)	(0.000) 0.102*** (0.000) 0.014 (0.409) 0.027* (0.055) 0.073*** (0.001)	(0.000) 0.112*** (0.000) 0.027 (0.317) 0.024 (0.285) 0.075*** (0.009)	(0.000) 0.101*** (0.000) 0.020 (0.395) 0.036** (0.024) 0.035 (0.123)	(0.000)  0.104*** (0.000) 0.009 (0.538) 0.061*** (0.000) 0.045** (0.013)	(0.000) 0.092*** (0.000) -0.007 (0.688) 0.007 (0.523) 0.151*** (0.000)	-2.980*** (0.000) 0.064*** (0.000) -0.026* (0.077) 0.023** (0.011) 0.191*** (0.000)
Socglob(IV) Glob (IV) GDP growth Foreign aid Public Investment Inflation	(0.000) 0.127*** (0.000)  0.037** (0.027) 0.029** (0.016) 0.066*** (0.001) -0.0001 ***	(0.000) 0.126*** (0.000)  0.035 (0.253) 0.028 (0.156) 0.037 (0.137) -0.00008 *** (0.000)	(0.000) 0.124*** (0.000)  0.046** (0.016) 0.025* (0.052) 0.038* (0.085) -0.0001 ***	(0.000) 0.123*** (0.000)  0.008 (0.625) 0.046*** (0.000) -0.076*** (0.000) *** (0.000)	(0.000) 0.128*** (0.000)  0.018 (0.289) 0.002 (0.839) 0.146*** (0.000) -0.0001 *** (0.000)	(0.000) 0.072*** (0.000)  0.029* (0.077) 0.011 (0.246) 0.128*** (0.000) -0.0001 *** (0.000)	(0.000) 0.102*** (0.000) 0.014 (0.409) 0.027* (0.055) 0.073*** (0.001) -0.0001 *** (0.000)	(0.000) 0.112*** (0.000) 0.027 (0.317) 0.024 (0.285) 0.075*** (0.009) -0.001 *** (0.000)	(0.000) 0.101*** (0.000) 0.020 (0.395) 0.036** (0.024) 0.035 (0.123) -0.0001 *** (0.000)	(0.000) 0.104*** (0.000) 0.009 (0.538) 0.061*** (0.000) 0.045** (0.013) -0.0001 *** (0.000)	(0.000) 0.092*** (0.000) -0.007 (0.688) 0.007 (0.523) 0.151*** (0.000) -0.0001 ***	-2.980*** (0.000) 0.064*** (0.000) -0.026* (0.077) 0.023** (0.011) 0.191*** (0.000) -0.0001 *** (0.000)
Socglob(IV) Glob (IV) GDP growth Foreign aid Public Investment Inflation Middle Income	(0.000) 0.127*** (0.000)  0.037** (0.027) 0.029** (0.016) 0.066*** (0.001) -0.0001 *** (0.000) -0.434** (0.021) 0.685***	(0.000) 0.126*** (0.000)  0.035 (0.253) 0.028 (0.156) 0.037 (0.137) -0.00008 *** (0.000) -0.619** (0.034) 0.331*	(0.000) 0.124*** (0.000)  0.046** (0.016) 0.025* (0.052) 0.038* (0.085) -0.0001 *** (0.000) - 0.641*** (0.007) 0.781***	(0.000) 0.123*** (0.000)  0.008 (0.625) 0.046*** (0.000) -0.0001 *** (0.000) -0.054 (0.804) 1.024***	(0.000) 0.128*** (0.000)  0.018 (0.289) 0.002 (0.839) 0.146*** (0.000) -0.0001 *** (0.000) -0.379 (0.132) 0.730***	(0.000) 0.072*** (0.000)  0.029* (0.077) 0.011 (0.246) 0.128*** (0.000) -0.0001 *** (0.000) 0.440** (0.046) 0.740***	(0.000) 0.102*** (0.000) 0.014 (0.409) 0.027* (0.055) 0.073*** (0.001) -0.0001 *** (0.000) 0.265 (0.215) 0.917***	(0.000) 0.112*** (0.000) 0.027 (0.317) 0.024 (0.285) 0.075*** (0.009) -0.001 *** (0.000) -0.492 (0.124) 1.015***	(0.000) 0.101*** (0.000) 0.020 (0.395) 0.036** (0.024) 0.035 (0.123) -0.0001 *** (0.000) 0.156 (0.558) 1.004***	(0.000) 0.104*** (0.000) 0.009 (0.538) 0.061*** (0.000) 0.045** (0.013) -0.0001 *** (0.000) 0.752***	(0.000) 0.092*** (0.000) -0.007 (0.688) 0.007 (0.523) 0.151*** (0.000) -0.0001 *** (0.000) 0.607**	-2.980*** (0.000) 0.064*** (0.000) -0.026* (0.077) 0.023** (0.011) 0.191*** (0.000) -0.0001 *** (0.000) 1.060***

\*\*\*,\*\*,\*: significance levels of 1%, 5% and 10% respectively. OLS: Ordinary Least Squares. R² (Pseudo R²) for OLS (Quantile Regressions). Lower quintiles (e.g., Q 0.1) signify nations where governance is least. IV: Instrumented Variable. Contrary to quantile regressions, OLS are based on the mean values of the outcome variable. Including OLS estimates is therefore to compare estimates based on mean values of the outcome variable with estimates based on the conditional distribution of the dependent variable.

#### 5. Concluding implication and future research direction

This study attempted to address the research question: how does globalization affect governance when existing levels of governance matter? To do so, I have used: (i) four bundled governance indicators and four globalization (political, economic, social, and general) variables; and (ii) instrumental variable Quantile Regressions. The methodological reasons underpinning my choice of this estimation technique is that blanket governance-globalization policies are not very likely to succeed unless they are contingent on initial levels of governance and tailored differently across countries with low, intermediate, and high levels of governance. The empirical evidence is based on a panel of 51 African countries for the period 1996-2011.

Based on the findings, globalization does indeed promote good governance. Second, for the most part, the effect of globalization is higher in terms of magnitude in the bottom quantiles of political, institutional, and general governance distributions. Third, overwhelmingly, the impact of globalization is higher in terms of magnitude in the top quantiles of the economic governance distribution. It is important to emphasize how these findings improve scholarly understanding of the conception and definition of governance in the light of the motivation of this paper which is to articulate an evolving paradigm shift in the conception of governance. Prior to these established findings, the positive association between general governance (political, economic, institutional and general) and globalization would have been lacking in empirical validity. Hence, we have provided the empirical validity with which to substantiate the connection between these concepts of governance and globalization. This clarification is particularly useful because it has been argued by Asongu and Nwachukwu (2017c) that the concept of "general governance" is used without empirical validity in the literature. We have shown from the findings that the positive association between globalization and general governance withstands empirical scrutiny. Furthermore, the concept of general governance used in this paper entails all the six dimensions of governance from World Governance Indicators of the World Bank.

The above discourse also extends to the use of other composite governance concepts. For instance, empirical validity is also important because constituents of the composite governance variables we have employed translate different perspectives in the real world. For

instance, political governance has often conflated been with "strong democracy" (Asongu and Nwachukwu, 2016d). Unfortunately "strong democracy" is only the "voice and accountability" dimension of political governance. Let me substantiate this perspective with an example: while most African countries may be better in terms of "voice and accountability" when compared to China, China comparatively enjoys more political stability which is important for the effects of globalization on political governance. Hence, this study also falls within the framework of a theory-building exercise by arguing that since constituents of employed composite governance indicators are heterogeneous across geographical and political contexts, it is important to always substantiate policy implications with empirical findings that are void of conceptual conflation.

In the light of the findings, this inquiry hopes to contribute to the literature in its assessment of the role of globalization on governance by using novel concepts of governance with particular emphasis on countries with low, intermediate, and high levels of governance. These findings improve the extant literature which has established that: institutional reforms in Africa have been driven by globalization (McMillan 2013); globalization reduces corruption (Wei 2000; Lalountas, Manolas, and Varouras 2011; Asongu 2014a); poor governance has escalated as a result of globalization (Shapiro and Levine 2015); globalization of capital may provide wrong incentives to governance, leading to misgovernance and indiscipline (Krugman 1999; Rodrik and Subramanian 2009; Stiglitz 2010); trade openness improves the quality of institutions (Islam and Montenegro 2002; Busse and Gröning 2008), and globalization influences state and nonstate (Hu and Chan 2002) or domestic institutions (Ju and Wei 2011). In essence, the findings hope to provide the beginnings of a holistic approach to the conception and measurement of governance that employs a plethora of globalization indicators while conditioning the investigation on existing levels of governance.

One of the main policy implications of this study is that existing levels of governance influence how globalization affects governance standards. To put this implication into greater perspective, from the angle of political governance: (i) the positive effect of political globalization on political governance is apparent exclusively in countries with below-median levels of political governance while (ii) for the other globalization dimensions (economic, social and general), the positive effect on political governance is lower in terms of magnitude in countries with above-median levels of political governance. It follows that, countries with averagely lower initial levels of political governance benefit more in terms of political governance when compared to their counterparts with averagely higher levels of political

governance. In summary, the positive responsiveness of political governance to globalization is a decreasing function of above-median levels of political governance. The tendency or comparative advantage of countries with below-median levels of political governance can be extended to other investigated linkages between globalization and governance. Exceptions to this extension include, the: (i) effect of economic globalization on economic, institutional and general governance and (ii) impact of political globalization on economic governance.

In the light of the above, compared to countries with higher levels of governance, for the most part, globalization would benefit countries with lower levels of governance more. It is important to clarify why below-median countries in terms of political governance more positively respond to the positive effect of globalization on political/general governance when compared to the their above-median counterparts. We first begin by categorizing sampled countries into above- and below-median categories in terms of political governance. After which, distinguishing features of the categories are identified. For the computation, the choice of political governance over other types of governance indicators is because above- and below-median tendencies of the findings of political governance are broadly consistent with those of general governance. Whereas the median of political governance is -0.115, we notice that some countries within the sampled period may identify with both the below-median and above-median categories. In order for countries to be exclusively categorized as either above or below the median, we compute the average value of political governance for each country and compare the computed values with the underlying median of -0.115. The resulting above-median category which consists of 39 countries include: Algeria; Angola; Benin; Botswana; Burkina Faso; Cameroon; Cape Verde; Comoros; Djibouti; Egypt; Equatorial Gabon; Gambia; Ghana; Guinea-Bissau; Kenya; Lesotho; Liberia; Libya; Guinea: Madagascar; Malawi; Mali; Mauritania; Mauritius; Morocco; Mozambique; Namibia; Niger; Nigeria; Rwanda; Senegal; Seychelles; Sierra Leone; South Africa; Swaziland; Togo; Tunisia; Uganda and Zambia. The corresponding below-median countries are 12: Burundi; Central African Republic; Chad; The Democratic Republic of Congo; Congo Republic; Côte d'Ivoire; Eritrea; Ethiopia; Guinea; Somalia; Sudan and Zimbabwe.

In the light of the above, it is reasonable to hypothesize that the main characteristics in below-median are civil wars or political instability. As shown by Asongu (2014b), compared to the rest of the world, political strife, conflicts and civil wars have substantially affected governance standards in Africa: Angola (1975-2002); Burundi (1993-2005); Chad (2005-2010); Sierra Leone (1991-2002); Liberia (1999-2003); the Congo Democratic

Republic; Sudan (with carnages in Durfur); Somalia and Côte d'Ivoire (a resurrected crisis in 2011 after the 1999 coup d'état and 2002-2007 civil war) and the Central African Republic (with waves of failed coup d'états that occurred between 1996-2003 and the Bush War of 2004-2007). The author articulates that prior to the Arab Spring (which is consistent with the periodicity employed in this study), seven of the nine cases of total chaos and societal breakdown known in recent history were registered in Africa: Angola, Burundi, Sierra Leone, Liberia, Zaire/Congo, Somalia, and Sudan (with the exceptions of Afghanistan and Syria).

It is important to note that countries with above-median levels of political stability which have witnessed substantial political instability in the stylized facts from Asongu largely experienced political turmoil before 2003. Hence, (2014b),in the light of the sampled periodicity (1996-2001), these countries do not weigh substantially in contradicting the logic behind the narratives, notably: that political stability and civil wars are the main distinguishing features between the identified below-median and above-median categories. This narrative is further substantiated by the fact that there are missing observations in World Governance indicators for the years 1997, 1999 and 2001. It follows from above that, the countries which have experienced political instability and conflicts are more likely to enjoy the positive benefits of globalization in improving political/general governance when compared with their counterparts that have enjoyed relative political stability. The explanation is intuitive because post-conflict countries usually experience more changes of development indicators, compared to corresponding changes in countries that have experienced relative political stability (Beegle et al., 2016).

Future studies can improve the extant literature by assessing what channels explain this difference in governance benefits from globalization. We have proposed the channels of wars and civil conflicts. However, it is important to substantiate the perspective with more robust empirical validity that directly engages indicators of civil war and political conflict as exogenous mechanisms.

Of the four reasons motivating this study, three have already been discussed in this concluding section in the light of findings, namely: (i) an evolving paradigm in the conception of governance; (ii) gaps and debates in the literature and (iii) need to account for initial levels of governance. In the light of the above clarifications, we conclude by articulating the connection of the findings with the missing fourth motivation of poverty reduction. Given the consensus on the role of good governance in human development (Efobi 2015; Fosu 2013; Anyanwu and Erhijakpor 2014; Fonchingong 2014), in the post-2015 sustainable

development era, sampled countries that adopt inclusive globalization policies are very likely to enjoy inclusive development due to enhanced globalization-driven governance.

## Appendices

**Appendix 1: Definitions of Variables** 

Variables	Signs	Definitions of variables (Measurement)	Sources
Political Stability	PolSta	"Political stability/no violence (estimate): measured as the perceptions of the likelihood that the government will be destabilized or overthrown by unconstitutional and violent means, including domestic violence and terrorism"	World Bank (WGI)
Voice & Accountability	V&A	"Voice and accountability (estimate): measures the extent to which a country's citizens are able to participate in selecting their government and to enjoy freedom of expression, freedom of association and a free media".	World Bank (WGI)
Political Polgov Governance		First Principal Component of Political Stability and Voice & Accountability. The process by which those in authority are selected and replaced.	PCA
Government Effectiveness	Gov. E	"Government effectiveness (estimate): measures the quality of public services, the quality and degree of independence from political pressures of the civil service, the quality of policy formulation and implementation, and the credibility of governments' commitments to such policies".	World Bank (WGI)
Regulation Quality	RQ	"Regulation quality (estimate): measured as the ability of the government to formulate and implement sound policies and regulations that permit and promote private sector development".	World Bank (WGI)
Economic Governance	Ecogov	"First Principal Component of Government Effectiveness and Regulation Quality. The capacity of government to formulate & implement policies, and to deliver services".	PCA
Rule of Law	RL	"Rule of law (estimate): captures perceptions of the extent to which agents have confidence in and abide by the rules of society and in particular the quality of contract enforcement, property rights, the police, the courts, as well as the likelihood of crime and violence".	World Bank (WGI)
Corruption- Control	CC	"Control of corruption (estimate): captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as 'capture' of the state by elites and private interests".	World Bank (WGI)
Institutional Governance	Instgov	First Principal Component of Rule of Law and Corruption- Control. The respect for citizens and the state of institutions that govern the interactions among them	PCA
General Governance	G.gov	First Principal Component of Political, Economic and Institutional Governances	PCA
Political Globalisation	Polglob	"This captures the extent of political globalisation in terms of number of foreign embassies in a country, membership in international organisations, participation in UN security".	Dreher, Gaston, Martens and Van Boxem (2010)
Economic	Ecoglob	"Overall economic globalisation (considers both the flow and	Dreher, Gaston, Martens and Van

Globalisation		the restrictions in a given country to derive this). The higher, the better social globalisation".	Boxem (2010)					
Social Globalisation	Socglob	Socglob "Overall scores for the countries extent of social globalisation. The higher the better socially globalised the country".						
Globalisation	Glob	This is an overall index that contains economic globalisation, social globalisation and political globalisation	Dreher, Gaston, Martens and Van Boxem (2010)					
Education	Educ	Secondary School Enrolment (% of Gross)	World Bank (WDI)					
Mobile phones	Mobile	Mobile phone subscriptions (per 100 people)	World Bank (WDI)					
GDP growth	GDPg	Gross Domestic Product (GDP) growth (annual %)	World Bank (WDI)					
Population growth	Popg	Population growth rate (annual %)	World Bank (WDI)					
Foreign aid	Aid	Total Development Assistance (% of GDP)	World Bank (WDI)					
Public Investment	Pub. Ivt.	Gross Public Investment (% of Gross)	World Bank (WDI)					
Inflation	Inflation	Annual Consumer Price Inflation	World Bank (WDI)					

WDI: World Bank Development Indicators. WGI: World Governance Indicators. PCA: Principal Component Analysis.

Appendix 2: Summary statistics (1996-2011)

	Mean	SD	Minimum	Maximum	Observations
Political Stability	-0.572	0.954	-3.304	1.189	612
Voice & Accountability	-0.709	0.730	-2.178	1.009	612
Political Governance	0.000	1.273	-3.323	2.790	612
Government Effectiveness	-0.731	0.639	-2.454	0.876	662
Regulation Quality	-0.708	0.654	-2.663	0.846	612
Economic Governance	-0.0009	1.048	-2.252	2.458	611
Rule of Law	-0.708	0.683	1.048	-2.525	612
Control of Corruption	-0.600	0.601	-2.061	1.255	611
Institutional Governance	-0.002	1.368	-3.584	3.596	611
General Governance	-0.004	1.985	-5.535	4.819	611
Political Globalisation (IV)	58.696	17.576	22.439	93.575	765
Economic Globalisation (IV)	44.991	12.643	14.041	84.229	645
Social Globalisation (IV)	28.865	11.113	6.582	65.004	765
Globalisation (IV)	41.775	9.881	18.774	68.453	756
Education(SSE)	40.941	26.892	4.022	123.893	491
Mobile phone penetration	19.829	29.390	0.000	171.515	811
GDP growth	4.863	7.297	-32.832	106.279	792
Population growth	2.317	1.007	-1.081	9.770	816
Foreign aid	10.212	12.245	-0.251	147.054	791
Public Investment	7.491	4.692	0.000	43.011	713
Inflation	54.723	925.774	-9.797	24411.03	717

S.D: Standard Deviation. IV: Instrumental Variable.

Appendix 3: Correlation matrix (uniform sample size: 286)

Politic	cal Gover	rnance	Econo	mic Gov	ernance	Institu	tional Go	vernance			Globalisa	tion	ĺ		Cor	ntrol Varia	bles				
PS	VA	Polgov	GE	RQ	Ecogov	CC	RL	Instgov	G.gov	IVPolglob	<b>IVEcoglob</b>	IVSocglob	IVGlob	SSE	Mobile	GDPg	Popg	Aid	Pub.Ivt.	Inflation	
1.000	0.704	0.913	0.666	0.708	0.453	0.735	0.786	0.782	0.864	-0.041	0.433	0.553	0.470	0.414	0.283	-0.072	-0.352	-0.167	0.140	-0.188	PS
	1.000	0.927	0.694	0.742	0.397	0.707	0.776	0.763	0.866	0.044	0.390	0.460	0.446	0.419	0.234	-0.067	-0.215	-0.071	0.145	-0.104	VA
		1.000	0.735	0.787	0.462	0.776	0.845	0.834	0.938	0.019	0.427	0.540	0.491	0.440	0.280	-0.072	-0.296	-0.117	0.157	-0.156	Polgov
			1.000	0.877	0.634	0.867	0.885	0.905	0.886	0.199	0.434	0.705	0.662	0.678	0.407	-0.037	-0.484	-0.294	0.472	-0.129	GE
				1.000	0.723	0.810	0.855	0.859	0.910	0.189	0.438	0.707	0.661	0.615	0.420	-0.098	-0.398	-0.325	-0.043	-0.227	RQ
					1.000	0.545	0.598	0.586	0.620	0.208	0.264	0.586	0.521	0.409	0.315	-0.102	-0.340	-0.243	-0.295	-0.228	Ecogov
						1.000	0.876	0.971	0.916	-0.032	0.437	0.664	0.530	0.613	0.353	-0.101	-0.531	-0.216	0.133	-0.154	CC
							1.000	0.964	0.953	0.118	0.430	0.729	0.632	0.646	0.391	-0.069	-0.484	-0.259	0.118	-0.173	RL
								1.000	0.964	0.042	0.446	0.716	0.596	0.650	0.384	-0.084	-0.523	-0.246	0.128	-0.168	Instgov
									1.000	0.069	0.461	0.689	0.605	0.596	0.372	-0.088	-0.439	-0.224	0.101	-0.188	G.gov
										1.000	-0.150	0.155	0.489	0.221	0.258	-0.081	0.051	-0.214	-0.103	-0.100	IVPolglob
											1.000	0.518	0.696	0.573	0.514	0.058	-0.497	-0.416	0.015	0.205	IVEcoglob
												1.000	0.826	0.795	0.590	-0.187	-0.753	-0.520	-0.170	-0.160	IVSocglob
													1.000	0.789	0.678	-0.099	-0.594	-0.572	-0.124	-0.019	IVGlob
														1.000	0.622	-0.130	-0.699	-0.594	-0.067	-0.097	SSE
															1.000	-0.106	-0.440	-0.372	-0.021	-0.087	Mobile
																1.000	0.213	0.090	0.241	0.027	GDPg
																	1.000	0.489	0.086	0.086	Popg
																		1.000	0.307	0.094	Aid
																			1.000	0.015	Pub. Ivt.
																				1.000	Inflation

PS: Political Stability/Nonviolence. VA: Voice & Accountability. Polgov: Political Governance. GE: Government Effectiveness. RQ: Regulation Quality. Ecogov: Economic Governance. CC: Corruption-Control. RL: Rule of Law. Instgov: Institutional Governance. G.Gov: General Governance. IV: Instrumented value. Polgov: Political Globalisation. Ecoglob: Economic Globalisation. Socglob: Social Globalisation. Globs: Globalisation. SSE: Secondary School Enrolment. Mobile: Mobile Phone Penetration. GDPg: Gross Domestic Product growth. Popg: Population growth. Aid: Foreign aid. Pub. Ivt: Public Investment.

#### References

- Ades, Alberto, and Rapheal di Tella. 1999. "Rents, Competition and Corruption." *American Economic Review* 89 (4): 982-993. Accessed on June 7, 2017. Available online at <a href="http://www.jstor.org/stable/117169">http://www.jstor.org/stable/117169</a>
- Anyanwu, John, and Andrew Erhijakpor. 2014. "Does Oil Wealth Affect Democracy in Africa?" *African Development Review* 26 (1): 15-37. Accessed on June 7, 2017. Available online at <a href="http://onlinelibrary.wiley.com/doi/10.1111/1467-8268.12061/full">http://onlinelibrary.wiley.com/doi/10.1111/1467-8268.12061/full</a>
- Asongu, Simplice. 2012. "Government quality determinants of stock market performance in African countries." *Journal of African Business* 13 (2): 183-199. Accessed on June 7, 2017. Available online at <a href="http://www.tandfonline.com/doi/abs/10.1080/15228916.2012.727744">http://www.tandfonline.com/doi/abs/10.1080/15228916.2012.727744</a>
- Asongu, Simplice. 2013. "Fighting corruption in Africa: do existing corruption-control levels matter?" *International Journal of Development Issues* 12 (1): 36-52. Accessed on June 7, 2017. Available online at http://www.emeraldinsight.com/doi/abs/10.1108/14468951311322109
- Asongu, Simplice. 2014a. "Globalization (fighting) corruption and development. How are these phenomena linearly and non-linearly related in wealth effects?" *Journal of Economic Studies* 41 (3): 346-369. Accessed on June 7, 2017. Available online at <a href="http://www.emeraldinsight.com/doi/abs/10.1108/JES-04-2012-0048">http://www.emeraldinsight.com/doi/abs/10.1108/JES-04-2012-0048</a>
- Asongu, Simplice. 2014b. "On the substitution of institutions and finance in investment." *Economics Bulletin*, 34(3): 1557-1574. Accessed on June 7, 2017. Available online at <a href="http://www.accessecon.com/Pubs/EB/2014/Volume34/EB-14-V34-I3-P142.pdf">http://www.accessecon.com/Pubs/EB/2014/Volume34/EB-14-V34-I3-P142.pdf</a>
- Asongu, Simplice. 2016a. "Sino-African relations: a review and reconciliation of dominant schools of thought." *Politics & Policy* 44 (2): 351-383. Accessed on June 7, 2017. Available online at <a href="http://onlinelibrary.wiley.com/doi/10.1111/polp.12152/full">http://onlinelibrary.wiley.com/doi/10.1111/polp.12152/full</a>
- Asongu, Simplice. 2016b. "Determinants of Growth in Fast Developing Countries: Evidence from Bundling and Unbundling Institutions." *Politics & Policy* 44 (1): 97-134. Available online at <a href="http://onlinelibrary.wiley.com/doi/10.1111/polp.12148/full">http://onlinelibrary.wiley.com/doi/10.1111/polp.12148/full</a>
- Asongu, Simplice, Uchenna Efobi, and Vanessa Tchamyou. 2018. "Globalization and Governance: A Critical Contribution to the Empirics." *International Journal of Development Issues*: Forthcoming. Accessed on June 7, 2017. Available online at <a href="http://www.afridev.org/RePEc/agd/agd-wpaper/Globalization-and-Governance.-A-Critical-Contribution-to-the-Empirics.pdf">http://www.afridev.org/RePEc/agd/agd-wpaper/Globalization-and-Governance.-A-Critical-Contribution-to-the-Empirics.pdf</a>
- Asongu, Simplice, and Oasis Kodila-Tedika. 2016. "Determinants of Property Rights Protection in Sub-Saharan Africa." *Journal of the Knowledge Economy*. Accessed on June 7, 2017. Available online at <a href="https://link.springer.com/article/10.1007/s13132-016-0419-z">https://link.springer.com/article/10.1007/s13132-016-0419-z</a>
- Asongu, Simplice, and Jacinta Nwachukwu. 2016a. "The Mobile Phone in the Diffusion of Knowledge for Institutional Quality in Sub-Saharan Africa." *World Development* 86 (October): 133-147. Accessed on June 7, 2017. Available online at http://www.sciencedirect.com/science/article/pii/S0305750X15312626

- Asongu, Simplice, and Jacinta Nwachukwu. 2016b. "Revolution empirics: predicting the Arab Spring" *Empirical Economics* 51 (2): 439-482. Accessed on June 7, 2017. Available online at <a href="https://link.springer.com/article/10.1007/s00181-015-1013-0">https://link.springer.com/article/10.1007/s00181-015-1013-0</a>
- Asongu, Simplice, and Jacinta Nwachukwu. 2016c. "Foreign aid and governance in Africa." *International Review of Applied Economics* 30 (1): 69-88. Accessed on June 7, 2017.

  Available online at http://www.tandfonline.com/doi/abs/10.1080/02692171.2015.1074164
- Asongu, Simplice, and Jacinta Nwachukwu. 2016d. "Law, politics and the quality of government in Africa", Politics & Policy, 44(5): 916-944. Accessed on June 7, 2017. Available online at
- http://onlinelibrary.wiley.com/doi/10.1111/polp.12171/full
- Asongu, Simplice, and Jacinta Nwachukwu. 2017a. 'Foreign Aid and Inclusive Development: Updated Evidence from Africa, 2005–2012." *Social Science Quarterly* 98 (1): 282–298. Accessed on June 7, 2017. Available online at http://onlinelibrary.wiley.com/doi/10.1111/ssqu.12275/full
- Asongu, Simplice, and Jacinta Nwachukwu. 2017b. "Globalization and Inclusive Human Development in Africa." *Man and the Economy* DOI: 10.1515/me-2017-0001. Accessed on June 7, 2017. Available online at <a href="https://www.degruyter.com/view/j/me.ahead-of-print/me-2017-0001/me-2017-0001.xml">https://www.degruyter.com/view/j/me.ahead-of-print/me-2017-0001/me-2017-0001.xml</a>
- Asongu, Simplice, and Jacinta Nwachukwu. 2017c. "The Impact of Terrorism on Governance in African Countries" *World Development* DOI: 10.1016/j.worlddev.2017.05.023. Available online at http://www.sciencedirect.com/science/article/pii/S0305750X17301857
- Asongu, Simplice, and John Ssozi. 2016. "Sino-African Relations: Some Solutions and Strategies to the Policy Syndromes." *Journal of African Business* 17(1): 33-51. Accessed on June 7, 2017. Available online at http://www.tandfonline.com/doi/abs/10.1080/15228916.2015.1089614
- Bai, Jushan. 2003. "Inferential theory for factor models of large dimensions." *Econometrica* 71 (1): 135-173. Accessed on June 7, 2017. Available online at http://onlinelibrary.wiley.com/doi/10.1111/1468-0262.00392/full
- Bai, Jushan. 2009. "Panel data models with interactive fixed effects." *Econometrica*, 77(4): 1229-1279. Accessed on June 7, 2017. Available online at <a href="http://onlinelibrary.wiley.com/doi/10.3982/ECTA6135/full">http://onlinelibrary.wiley.com/doi/10.3982/ECTA6135/full</a>
- Beegle, Kathleen. Luc, Christiaensen, Andrew Dabalen, and Isis Gaddis. 2016. "Poverty in a Rising Africa", Africa Poverty Report, the World Bank, Washington. Accessed: on July, 23, 2016. Available online at <a href="http://www.worldbank.org/en/region/afr/publication/poverty-rising-africa-poverty-report">http://www.worldbank.org/en/region/afr/publication/poverty-rising-africa-poverty-report</a>.
- Billger, Sherrilyn, and Rajeev Goel. 2009. "Do existing corruption levels matter in controlling corruption? Cross-country quantile regression estimates." *Journal of Development Economics* 90 (2): 299-305. Accessed on June 7, 2017. Available online at <a href="http://www.sciencedirect.com/science/article/pii/S0304387808000795">http://www.sciencedirect.com/science/article/pii/S0304387808000795</a>

- Bhagwati, Jagdish. 1982, "Directly unproductive, profit-seeking (DUP) activities." *Journal of Political Economy* 90 (5): 988-1002. Accessed on June 7, 2017. Available online at <a href="http://www.journals.uchicago.edu/doi/abs/10.1086/261104">http://www.journals.uchicago.edu/doi/abs/10.1086/261104</a>
- Bhagwati, Jagdish, and Thirukodikaval Srinivasan. 1980. "Revenue seeking: a generalisation of the theory of tariffs." *Journal of Political Economy* 80 (1): 1069-1087. Accessed on June 7, 2017. Available online at http://www.journals.uchicago.edu/doi/abs/10.1086/260929
- Bonaglia, Federico, Jorge de Macedo, and Maurizio Bussolo. 2001. "How globalization improves governance." *Working Paper* No. 181. OECD, Paris. Accessed on June 7, 2017. Available online at <a href="https://papers.ssrn.com/Sol3/papers.cfm?abstract\_id=288354">https://papers.ssrn.com/Sol3/papers.cfm?abstract\_id=288354</a>
- Busse, Mathias, and Steffen Gröning. 2008. "Does Trade Openness Lead to Better Governance?" Hamburg Institute of International Economics (HWWI). Accessed on June 7, 2017. Available online at <a href="http://www.etsg.org/ETSG2009/papers/groning.pdf">http://www.etsg.org/ETSG2009/papers/groning.pdf</a>
- Djankov, Simeon, Rafael La Porta, Florencio Lopez-De-Silanes, and, Andrei Shleifer. 2003. "Courts." *Quarterly Journal of Economics* 118 (2): 453-517. Accessed on June 7, 2017. Available online at <a href="https://academic.oup.com/qje/article-abstract/118/2/453/1899580/Courts">https://academic.oup.com/qje/article-abstract/118/2/453/1899580/Courts</a>
- Dreher, Axel, Noel Gaston, Pim Martens, and Lotte Van Boxem. 2010. "Measuring Globalization Opening the Black Box. A Critical Analysis of Globalization Indices." *Journal of Globalization Studies* 1 (1): 166-185. Accessed on June 7, 2017. Available online at <a href="https://cyberleninka.ru/article/n/measuring-globalization-opening-the-black-box-a-critical-analysis-of-globalization-indices">https://cyberleninka.ru/article/n/measuring-globalization-opening-the-black-box-a-critical-analysis-of-globalization-indices</a>
- Efobi, Uchenna. 2015. "Politicians' Attributes and Institutional Quality in Africa: A Focus on Corruption", *Journal of Economic Issues* 49 (3): 787-813. Accessed on June 7, 2017. Available online at http://www.tandfonline.com/doi/abs/10.1080/00213624.2015.1072393
- Figge, Lukas, and Pims Martens. 2014. "Globalization Continues: The Maastricht Globalization Index Revisited and Updated." *Globalization* 11 (6): 875-893. Accessed on June 7, 2017. Available online at <a href="http://www.tandfonline.com/doi/abs/10.1080/14747731.2014.887389">http://www.tandfonline.com/doi/abs/10.1080/14747731.2014.887389</a>
- Fonchingong, Charles. 2014. "Firming Up Institutional Policy for Deprived Elderly in Cameroon." *Politics & Policy* 42 (6): 948-980. Accessed on June 7, 2017. Available online at <a href="http://onlinelibrary.wiley.com/doi/10.1111/polp.12101/full">http://onlinelibrary.wiley.com/doi/10.1111/polp.12101/full</a>
- Fosu, Augustin. 2013. "Growth of African Economies: Productivity, Policy Syndromes and the Importance of Institutions." *Journal of African Economies* 22 (4): 523-551. Accessed on June 7, 2017. Available online at <a href="https://academic.oup.com/jae/article-abstract/22/4/523/745192/Growth-of-African-Economies-Productivity-Policy">https://academic.oup.com/jae/article-abstract/22/4/523/745192/Growth-of-African-Economies-Productivity-Policy</a>
- Fosu, Augustin. 2015a. "Growth, Inequality and Poverty in Sub-Saharan Africa: Recent Progress in a Global Context." *Oxford Development Studies* 43 (1): 44-59. Accessed on June 7, 2017. Available online at http://www.tandfonline.com/doi/abs/10.1080/13600818.2014.964195
- Fosu, Augustin K. 2015b. *Growth and Institutions in African Development*. New York: Routledge Studies in Development Economics. Accessed on June 7, 2017. Available

- online at <a href="https://www.amazon.com/Institutions-African-Development-Routledge-Economics/dp/1138816779">https://www.amazon.com/Institutions-African-Development-Routledge-Economics/dp/1138816779</a>
- Gatti, Roberta. 1999. "Corruption and trade tariffs, or a case for uniform tariffs." *Working Paper* No. 2216. *World Bank Policy Research*, Washington, DC. Accessed on June 7, 2017. Available online at <a href="http://documents.worldbank.org/curated/en/223751468741371712/Corruption-and-trade-tariffs-or-a-case-for-uniform-tariffs">http://documents.worldbank.org/curated/en/223751468741371712/Corruption-and-trade-tariffs-or-a-case-for-uniform-tariffs</a>
- Greenaway-Mcgrevy Ryan, Chirok Han, and Donggyu Sul. 2012. "Asymptotic distribution of factor augmented estimators for panel regression." *Journal of Econometrics* 169 (1): 48-53. Accessed on June 7, 2017. Available online at <a href="http://www.sciencedirect.com/science/article/pii/S0304407612000048">http://www.sciencedirect.com/science/article/pii/S0304407612000048</a>
- Hu, Yan, and Roger Chan. 2002. "Globalization, governance and development of the Pearl River Delta region." *The China Review* 2 (1): 61-84. Accessed on June 7, 2017. Available online at http://www.jstor.org/stable/23462072
- Islam, Roumeen, and Claudio Montenegro. 2002. "What determines the quality of institutions?" *World Bank Policy Research Working Paper* No. 2764, Washington. Accessed on June 7, 2017. Available online at https://elibrary.worldbank.org/doi/abs/10.1596/1813-9450-2764
- Jolliffe, Ian. 2002. *Principal Component Analysis* (2nd Ed.) New York: Springer. Accessed on June 7, 2017. Available online at <a href="http://www.springer.com/gp/book/9780387954424">http://www.springer.com/gp/book/9780387954424</a>
- Ju, Jiandong, and Shan-Jing Wei. 2011. "When is quality of financial system a source of comparative advantage?" *Journal of International Economics* 84 (2): 178-187. Accessed on June 7, 2017. Available online at http://www.sciencedirect.com/science/article/pii/S0022199611000304
- Kaiser, Henry. 1974. "An index of factorial simplicity." *Psychometrika* 39 (1): 31-36. Accessed on June 7, 2017. Available online at <a href="https://link.springer.com/article/10.1007%2FBF02291575?LI=true">https://link.springer.com/article/10.1007%2FBF02291575?LI=true</a>
- Kangoy, Thiery. 2013. "Does Aid Unpredictability Weaken Governance? Evidence From Developing Countries." *The Developing Economies* 51 (2): 121-144. Accessed on June 7, 2017. Available online at http://onlinelibrary.wiley.com/doi/10.1111/deve.12008/full
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2007a. "Growth and Governance: A Reply." *Journal of Politics* 69 (2): 555-562. Accessed on June 7, 2017. Available online at http://onlinelibrary.wiley.com/doi/10.1111/j.1468-2508.2007.00550.x/full
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2007b. "Growth and Governance: A Rejoinder." *Journal of Politics* 69 (2): 570-572. Accessed on June 7, 2017. Available online at <a href="http://www.journals.uchicago.edu/doi/abs/10.1111/j.1468-2508.2007.00552.x?journalCode=jop">http://www.journals.uchicago.edu/doi/abs/10.1111/j.1468-2508.2007.00552.x?journalCode=jop</a>
- Kaufmann, Daniel, Aart Kraay, and Massimo Mastruzzi. 2011. "The worldwide governance indicators: Methodology and analytical Issues." *Hague Journal on the Rule of Law* 3 (2): 220–246. Accessed on June 7, 2017. Available online at <a href="https://link.springer.com/article/10.1017/S1876404511200046">https://link.springer.com/article/10.1017/S1876404511200046</a>

- Koenker, Roger, and Bassett Gilbert. 1978. "Regression quantiles." *Econometrica* 46 (1): 33-50. Accessed on June 7, 2017. Available online at <a href="https://www.jstor.org/stable/1913643">https://www.jstor.org/stable/1913643</a>
- Koosimile, Anthony, and Shanah Suping. 2015. "An Examination of the Influence of Globalization on Science Education in Anglophone Sub-Saharan Africa."

  International Journal of Science Education 37 (14): 2358-2385. Accessed on June 7, 2017.

  Available online at <a href="http://www.tandfonline.com/doi/abs/10.1080/09500693.2015.1079667">http://www.tandfonline.com/doi/abs/10.1080/09500693.2015.1079667</a>
- Krugman, Paul. 1999. "Balance sheets, the transfer problem, and financial crises." *International Tax and Public Finance* 6 (4): 459-472. Accessed on June 7, 2017. Available online at https://link.springer.com/article/10.1023/A%3A1008741113074
- Klitgaard, Robert. 1988. *Controlling Corruption*. Berkeley, CA., and London: University of California Press. Accessed on June 7, 2017. Available online at http://www.jstor.org/stable/10.1525/j.ctt1pnj3b
- Krueger, Anne. 1974. "The political economy of the rent seeking society." *American Economic Review* 64 (3): 291-303. Accessed on June 7, 2017. Available online at <a href="https://www.jstor.org/stable/1808883">https://www.jstor.org/stable/1808883</a>
- La Porta, Rapheal, Florencio Lopez-De-Silanes, Andrei Shleifer, and Robert Vishny. 1998. "Law and finance." *Journal of Political Economy* 106 (6): 1113-1155. Accessed on June 7, 2017. Available online at <a href="http://www.jstor.org/stable/10.1086/250042">http://www.jstor.org/stable/10.1086/250042</a>
- La Porta, Rapheal, Florencio Lopez-De-Silanes, Andrei Shleifer, and Robert Vishny. 1999. "The quality of government." *Journal of Law, Economics and Organization* 15 (1): 222-279. Accessed on June 7, 2017. Available online at <a href="https://academic.oup.com/jleo/article-abstract/15/1/222/827397/The-quality-of-government">https://academic.oup.com/jleo/article-abstract/15/1/222/827397/The-quality-of-government</a>
- Lalountas, Dionisios, George Manolas, and Ioannis Vavouras. 2011. "Corruption, globalization and development: How are these three phenomena related?" *Journal of Policy Modeling* 33 (4): 636-648. Accessed on June 7, 2017. Available online at <a href="http://www.sciencedirect.com/science/article/pii/S0161893811000172">http://www.sciencedirect.com/science/article/pii/S0161893811000172</a>
- McKenzie, Colin, and Michael McAleer. 1997. "On efficient estimation and correct inference in models with generated regressors: A general approach." *Japanese Economic Review* 48 (4): 368-389. Accessed on June 7, 2017. Available online at http://onlinelibrary.wiley.com/doi/10.1111/1468-5876.00060/full
- McMillan, Margaret. 2013. "The Changing Structure of Africa's Economies." Background Paper for *African Economic Outlook 2013*. African Development Bank, OECD Development Center, and United Nations Development Program.
- Okada, Keisuke, and Sovannroeun Samreth. 2012. "The effect of foreign aid on corruption: A quantile regression approach." *Economic Letters* 11 (2): 240-243. Accessed on June 7, 2017. Available online at http://www.sciencedirect.com/science/article/pii/S016517651100574X
- Nworu, Osondu. 2017. "Export: Improving Nigerian Government Revenue Base and Economic Diversification." Human Resource Management Research 7(1): 65-73. Accessed on July 1, 2017. Available online at <a href="http://article.sapub.org/10.5923.j.hrmr.20170701.08.html">http://article.sapub.org/10.5923.j.hrmr.20170701.08.html</a>

- Oxley, Les, and Micheal Mcaleer. 1993. "Econometric issues in macroeconomic models with generated regressors." *Journal of Economic Surveys* 7 (1): 1-40. Accessed on June 7, 2017. Available online at <a href="http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6419.1993.tb00158.x/abstract">http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6419.1993.tb00158.x/abstract</a>
- Pagan, Adrian. 1984. "Econometric issues in the analysis of regressions with generated regressors." *International Economic Review* 25 (1): 221-247. Accessed on June 7, 2017. Available online at <a href="https://www.jstor.org/stable/2648877">https://www.jstor.org/stable/2648877</a>
- Pesaran, Hashem. 2006. "Estimation and inference in large heterogeneous panels with a multifactor error structure." *Econometrica* 74 (4): 967-1012. Accessed on June 7, 2017. Available online at <a href="https://www.jstor.org/stable/3805914">https://www.jstor.org/stable/3805914</a>
- Rodrik, Daniel, and Arvind Subramanian. 2009. "Why did financial globalization disappoint?" *IMF Staff Papers* 56 (1): 112-138. Available online at <a href="https://link.springer.com/article/10.1057/imfsp.2008.29">https://link.springer.com/article/10.1057/imfsp.2008.29</a>
- Stiglitz, Joseph. 2010. "Risk and global economic architecture: Why full financial integration may be undesirable." *The American Economic Review* 100 (2): 388-392. Accessed on June 7, 2017. Available online at <a href="https://www.aeaweb.org/articles?id=10.1257/aer.100.2.388">https://www.aeaweb.org/articles?id=10.1257/aer.100.2.388</a>
- Stock, James, and Mark Watson. 2002. "Forecasting using principal components from a large number of predictors." *Journal of the American Statistical Association* 97 (460): 1167-1179. Accessed on June 7, 2017. Available online at <a href="http://www.tandfonline.com/doi/abs/10.1198/016214502388618960">http://www.tandfonline.com/doi/abs/10.1198/016214502388618960</a>
- Tchamyou, Vanessa. 2016. "The role of knowledge economy in African business." *Journal of the Knowledge Economy*. Accessed on June 7, 2017. Available online at <a href="https://link.springer.com/article/10.1007/s13132-016-0417-1">https://link.springer.com/article/10.1007/s13132-016-0417-1</a>
- Treisman, Daniel. 2000. "The causes of corruption: a cross-national study." *Journal of Public Economics* 76 (3): 399-457. Accessed on June 7, 2017. Available online at http://www.sciencedirect.com/science/article/pii/S0047272799000924
- Wei, Shang-Jin. 2000. "Natural openness and good governance." *Working Paper* No. 7765, NBER, Cambridge, MA. Accessed on June 7, 2017. Available online at <a href="http://www.nber.org/papers/w7765">http://www.nber.org/papers/w7765</a>
- Westerlund, Joakim, and Jean-Pierre Urbain. 2013a. "On the estimation and inference in factor-augmented panel regressions with correlated loadings." *Economic Letters* 119 (3): 247-250. Accessed on June 7, 2017. Available online at http://www.sciencedirect.com/science/article/pii/S0165176513001316
- Westerlund, Joakim, and Jean-Pierre Urbain. 2013b. "On the implementation and use of factor-augmented regressions in panel data" *Journal of Asian Economics* 28(October): 3-11. Accessed on June 7, 2017. Available online at <a href="http://www.sciencedirect.com/science/article/pii/S1049007813000171">http://www.sciencedirect.com/science/article/pii/S1049007813000171</a>
- Westerlund, Joakim, and Jean-Pierre Urbain. 2015. "Cross-sectional averages versus principal components." *Journal of Econometrics* 185 (2): 372-377. Accessed on June 7, 2017. Available online at <a href="http://www.sciencedirect.com/science/article/pii/S0304407614002784">http://www.sciencedirect.com/science/article/pii/S0304407614002784</a>