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# Globalisation and Governance in Africa: A Critical Contribution to the Empirics

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**Abstract**

This study assesses the effect of globalisation on governance in 51 African countries for the period 1996-2011. Ten bundled and unbundled governance indicators and four globalisation variables are used. The empirical evidence is based on Generalised Method of Moments. The following findings are established. First, on political governance, only social globalisation improves political stability while only economic globalisation does not increase voice & accountability and political governance. Second, with regard to economic governance: (i) only economic globalisation significantly promote regulation quality; (ii) social globalisation and general globalisation significantly advance government effectiveness and (iii) economic globalisation and general globalisation significantly promote economic governance. Third, as concerns institutional governance, whereas only social globalisation improves corruption-control, the effects of globalisation dynamics on the rule of law and institutional governance are not significant. Fourth, the impacts of social globalisation and general globalisation are positive on general governance. It follows that: (i) political governance is driven by voice and accountability compared to political stability; (ii) economic governance is promoted by both

regulation quality and government effectiveness from specific globalisation angles and (iii) globalisation does not improve institutional governance for the most part. Theoretical contributions and policy implications are discussed.

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

## 1. Introduction

This study assesses the effect of globalisation on governance by taking into consideration different dimensions of governance indicators and globalisation variables. It asks two important questions: how does globalisation influence the perceived level of governance in African countries; and what type of globalisation is most important for the development of governance structure within African countries. The positioning of this inquiry is based on two main motivations, notably: the prevailing African poverty and the role of institutions in decreasing this poverty, while considering that globalisation plays an important role in determining the quality of institutions; also, there is a lingering gap in the literature on the interplay between globalisation and governance and this study intends to empirically contribute in this regard.

Focusing on the prevailing rate of poverty in Africa, an April 15th World Bank report in 2015 on the Millennium Development Goals (MDGs) has shown that poverty has been decreasing in all world regions with the exception of Africa. About 45% of countries in Sub-Saharan Africa (SSA) are substantially off-track from achieving the MDGs extreme poverty target (Asongu & Kodila-Tedika, 2015; World Bank, 2015). This statistics sharply contrasts with recent evidence that the continent has been enjoying over two decades of resurgence in growth that began in the mid 1990s (see Fosu, 2015a, p. 44). Furthermore, good institutions are crucial in fighting extreme poverty (Fosu, 2015b;c)[1] and the ineluctable process of globalisation affects the quality of these institutions (Lalountas et al., 2011; Asongu, 2014)[2].

[1] The quality of institutions has been considerably documented to be connected to inclusive growth, notably in: consolidating the foundations of social change (Efobi, 2015) and uplifting living standards via better economic resource management (Fosu, 2013; Fonchingong, 2014; Anyanwu & Erhijakpor, 2014).
[2] It is interesting to note that globalisation is an ineluctable process which can be neglected only at the price of endangering the prosperity of nations (Tchamyou, 2016).

Some of the channels through which globalisation affects countries' institutional structure include the transmission of social values and individual value formation that comes from interactions with wide range of backgrounds and nationality (Jensen & Oster, 2009; Berggren & Nilsson, 2015). These values affect individuals' orientation to leadership and can help shape perceptions of governance and institutional structure. Globalisation can also shape checks and balances among countries, such that countries with poor governance are checked by other countries that they have a relationship with. Overall, this action transmits into improved governance structure in countries. More so, with the increasing rate of technology advancement that drives globalisation, poor governance actions are able to be tracked and checked. For instance, corrupt practices can now be easily monitored through exchange of information among countries on individuals with corrupt track records. This is also able to reduce the incidence of cross-country corrupt practices.

Despite the predicted positive impact of globalisation on countries' governance structure, there are controversies in literature on the impact of globalisation. For instance, McMillan (2013) observes that the structural changes in Africa may not be caused by globalisation. With technology advancement that comes with globalisation, corruption has also been seen to escalate due to expanding networks of countries and individuals that make complex corrupt practices that are difficult to spot (Goredema, 2009). An important observation from some of the critics of globalisation, in relation to countries' governance structure, is that conclusion is reached by considering globalisation as a 'blanket' concept – I.e. the interaction among countries. Such definition of globalisation does not articulate some recent evolutions in the conception of globalisation and does not take into consideration the possibility that there may be differential governance impact if globalisation is disaggregated. Also, and on the other hand, the concept of governance has been employed without a holistic appreciation and measurement. For instance, Kangoye (2013) used 'corruption-control' as 'governance'. On the other hand, the concepts of political governance, economic governance and institutional governance have been employed in the literature (Kaufmann et al., 2007a; b) without statistical validity. For instance, it is not appropriate to employ the term political governance unless it translates a variable that is composed of voice and accountability and political stability/no violence. We address this shortcoming by using ten bundled and unbundled governance indicators, namely: political governance (voice & accountability and political stability/no violence); economic governance (government effectiveness and regulation quality); institutional governance (corruption-control and the rule of law) and general governance (economic, political and institutional governances).

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

## 2. Theoretical underpinnings and empirical evidence

This section is discussed in three main strands, namely: (i) the relationship between globalisation and governance, (ii) factors linking globalisation to governance which is engaged in three main streams and (iii) testable hypotheses.

On the nexus between globalisation and governance, the relevant question worth considering is how globalisation influences the perceived level of governance in a country. With regard to Klitgaard (1988), bad governance thrives when monopoly in power is characterised with low accountability and discretion. Incentives to mismanagement and poor governance are not very feasible in societies in which economic activities are predominantly carried out within a perfect competition setting and no singular agent has the means of affecting the price of the good/services he/she buys/sells. Within the same perspective, poor governance can be curbed when economic rents rely on the discretionary power of some public officials and/or when governments as well as economic activities of monopolistic nature are within strict accountability rules (Asongu, 2014). Political openness to the protestant ethic is generally associated with higher levels of governance (Treisman, 2000; Bonaglia et al., 2001). On the contrary, poor governance is more pervasive in the presence of a federal state, when a country is less open to international trade or when her democratic foundations are still immature (Klitgaard, 1998).

On the factors linking globalisation and governance, according to Krueger (1974) and Bonaglia et al. (2001), trade and financial globalisation could shift the balance between the costs and benefits via the following channels, which are engaged in three streams. The first channel articulates activities of rent-seeking that are caused by restrictions to imports. Contrary to quotas, imports, tariffs and other official permissions generated substantial economic rents because of the monopolistic power they endow to legal importers. In efforts to appropriate such rents, economic agents could compete legally or engage in rent-seeking of

illegal nature, black market participation, smuggling, bribery and corruption. It has been demonstrated that such rent-seeking activities prompt an economy to operate at a low threshold of its optimal, generate some form of divergence between social and private cost and hence, engender some cost in welfare in addition to the tariff restrictions (Krueger, 1974). In the studies that followed, the original idea of Kreuger was generalised to theories of direct unproductive profit-seeking activities (Bhagwati, 1982) and tariffs (Bhagwati & Srinivasan, 1980). In these theories, more arguments were provided in substantiation of trade and capital openness.

Gatti (1999) has assessed linkages between 'trade restrictions' and corruption. The author disentangles two impacts of inward-linked policies on corruption, namely, the: foreign competition effect and direct policy distortion. Substantial barriers to international transactions have a direct effect on the ability of public officials to receive bribe from private economic agents in exchange for policy distortion and foreign competition. Moreover, this leads to reduced competition between foreign and domestic firms so that corruption, poor management and rent seeking is high.

Second, evidence has been provided by Ades and Di Tella (1999) for the competition-decreasing channel. The authors have argued that the level of rents from the markets in particular and in general terms, determine the intensity of aspects of poor governance like corruption within an economy. They have further hypothesized that because of changes in the size of rents due to variations in the intensity of competition, competition could have varying impacts on corruption. On the one hand, substantial rents consequent from an environment characterised with low competition can augment the quantity that bureaucrat can obtain as bribes. On the other hand, within such a framework, a society would benefit more by increasing the monitoring and accountability of its bureaucracy. The authors suggest that calculating the correct net effect sign of aspects of bad governance (like corruption) is relevant because of its opposing tendencies. According to the authors, Nigeria illustrates a good example of the positive association between rents and corruption. For more than thirty years, about 80% of the government's income has been traceable to petroleum exports. Booms in imports and construction have been exclusively favourable to the ruling elite of political parties, hence validating the hypothesis of the connection between rents and bad governance.

A third channel that connects globalisation to governance acknowledges differences in the cost of monitoring public agents because of the substantial level of international integration (Wei, 2000). The underpinning logic here is that enhancing institutional quality

and its capacity to improve governance standards substantially depends on the resources that are devoted for the purpose. Accordingly, if a society allocates more in the consolidation of existing institutions and/or building of new ones, more rewards can be expected in terms of lower costs and/or higher benefits. Assuming that compared to domestic producers, foreign producers can more easily divert their investments or exports from one national market to another, it is reasonable to expect that corruption and bad governance are more detrimental to international transactions than to domestic transactions. The differential impact of corruption induces strong incentives for better governance. Hence, compared to an economy in isolation or autarky, an open economy is more likely to devote more resources to promoting good governance with increasing globalisation.

Lalountas et al. (2011) have shown that when faced with globalisation, higher-income countries are more concerned about the social and political dimensions of globalisation and hence, the they benefit from improved corruption-control standards. Conversely, lower-income countries are more focused on the economic dimension of globalisation; hence the incidence on corruption is less apparent. The conclusions of Lalountas et al. (2011) in developing countries have been partially confirmed in African countries by Asongu (2014). The current inquiry extends the underlying literature within three main perspectives. First, we bundle and unbundle institutions using ten governance indicators. It is interesting to note that the underlying studies are exclusively based on the corruption aspect of institutions. Second, the empirical strategy is based on Generalised Method of Moments (GMM) with forward orthogonal deviations as opposed to the Instrumental Variable Two-Stage-Least Squares used by the underlying authors. Third, our conception of globalisation is more holistic because social, political, economic and general dimensions of globalisation are critically engaged.

In the light of the above contribution, the following testable hypotheses are investigated in the empirics.

*Hypothesis 1*: Economic, social and political globalisations improve political governance and its constituents (voice & accountability and political stability/no violence).

*Hypothesis 2*: Economic, social and political globalisations improve economic governance and its constituents (government effectiveness and regulation quality).

*Hypothesis 3*: Economic, social and political globalisations improve institutional governance and its constituents (rule of law and corruption-control).

*Hypothesis 4*: Economic, social and political globalisations improve general governance.

## 3. Data and Methodology

### 3.1 Data

This paper assesses a panel of 51 African countries with data from Dreher et al. (2010), World Development and World Governance Indicators of the World Bank for period 1996-2011. The sampled periodicity is constrained by data availability. The dependent variables which are from World Governance indicators are: political governance (consisting of political stability/no violence and voice & accountability); economic governance (entailing government effectiveness and regulation quality); institutional governance (made of corruption-control and the rule of law) and general governance (including political governance, economic governance and institutional governance). The bundling exercise which is done by principal component analysis is discussed in Section 3.1.2.

The independent variables of interest are globalisation indicators from Dreher et al. (2008) and include: social globalisation, economic globalisation, political globalisation and general globalisation. The control variables from World Development Indicators are: Gross Domestic Product (GDP) growth; foreign aid, public investment, inflation and the lagged dependent variable. We observe from a preliminary assessment that controlling for more than four variables leads to instrument proliferation that biases estimated models.

Consistent with Asongu and Nwachukwu (2016a), we expect GDP growth to positively affect governance because higher-income nations have been documented to be associated with better governance structures. According to the same authors, chaotic inflation should reduce governance standards because *inter alia*, it may be associated with: (i) political instability, (ii) high corruption by public officials to compensate for decreasing purchasing power and (iii) disrespect of the rule of law. The effects of public investment and foreign aid on governance are debatable. For instance, whereas Okada and Samreth (2012) have established a negative nexus with corruption in developing countries, Asongu and Nwachukwu (2016b) have concluded on negative effects from foreign aid to the six good governance indicators from Kaufmann et al. (2010). The effect of public investment depends on among others, the governance dynamic and how disbursed funds are managed. For instance, funds destined to improve public commodities may improve economic governance whereas if the disbursements of underlying funds are linked to mismanagement and corruption, the effect on institutional governance is likely to be negative.

The definition and sources of variables is provided in Appendix 1, the summary statistics in Appendix 2 while the correlation matrix is disclosed in Appendix 3. As apparent in Appendix 3, some of the control variables are not used because of concerns of

multicollinearity. Accordingly, in addition of the discussed issue of overidentification or instrument proliferation when more than four control variables are employed, some control variables are not employed because of the high degrees of substitution with selected control variables. The unused control variables include: secondary school enrolment; mobile phone penetration and population growth.

### 3.2 Methodology

*3.2.1 Principal Component Analysis (PCA)*

The paper uses PCA to bundle the six governance variables from Kaufmann et al. (2010) into four composite variables, namely: political, economic, institutional and general governances. This technique has been applied in recent African institutional literature (see Asongu & Nwachukwu, 2016a). The PCA is a method in statistics that is used to reduce a set of highly correlated indicators into a smaller set of uncorrelated composite variables called principal components (PCs). These PCs are representative of a substantial variation or in the original dataset. Within this framework, six governance indicators are reduced into a general governance indicator or a single common factor. The resulting governance indicator represents three governance indicators, namely: political (voice & accountability and political stability), economic (regulation quality and government effectiveness) and institutional (corruption-control and the rule of law) governances. Institutional governance is the respect by citizens and the State of institutions that govern interactions between them. Economic governance is the formulation and implementation of policies that deliver public goods and services. Political governance is the election and replacement of political leaders.

The criterion used to retain common factors is from Jolliffe (2002) and Kaiser (1974). The authors recommend that only common factors that have an eigenvalue that is higher than the mean or one should be retained. From Table 1 it is apparent that General governance (G.Gov) has an eigenvalue of 4.787 and represents more than 79% of variability in the six governance indicators. Within the same framework, institutional governance (Instgov), political governance (Polgov) and economic governance (Ecogov) have total variations (eigenvalues) of 93.3%, 82.3% and 93.1% (1.867, 1.647 and 1.863) respectively.

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

| Principal Components | Component Matrix(Loadings) | | | | | | Proportion | Cumulative Proportion | Eigen 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.

It is important to note that some concerns have been raised on the quality of variables that are derived from primary regressions. As recently documented by Asongu and Nwachukwu (2016a), the issues are related to the consistency and efficiency of estimated coefficients as well as to the validity of inferences based on the estimated coefficients. According to Pagan (1984, p. 242), whereas *two-step* estimators are consistent and efficient, only few references that are valid can be drawn. The concern is broadly consistent with the bulk of literature on the subject (Oxley & McAleer, 1993; McKenzie & McAleer, 1997; Ba & Ng, 2006; Westerlund & Urbain, 2013a).

Within the framework of PC-augmented variables used in this study, Westerlund and Urbain (2012, 2013b) have built on previous studies (Pesaran, 2006; Stock & Watson, 2002; Bai, 2003; Bai, 2009; Greenaway-McGrevy et al., 2012) to conclude that normal inferences can be made from PC-augmented regressions so long as estimated coefficients converge to their true values at the rate $\sqrt{NT}$ , (where T is the number of time series and N denotes the number of cross-sections). They have gone further to emphasise that for such convergence to take place; N and T should be sufficiently large. Unfortunately, to the best of our knowledge, there is no specificity of how 'large is sufficiently large'. In the light of this factor, two concerns are relevant to this inquiry. On the one hand, it is not likely to further stretch N because 51 countries in Africa are engaged. On the other hand, it also not very likely to extend T because of three main reasons: (i) it is at the risk of compromising the validity of specifications since it will result in instrument proliferation that will bias estimated results; (ii) the starting year of the sample of 1996 cannot be extended downward because governance indicators from the World Bank are only available from 1996 and (iii) the periodicity ends in 2011 due to data availability constraints. Within the framework of empirical literature, valid inferences have been derived from PC-augmented empirics that have used far lower N and T, namely: countries in the MENA (Middle East & North Africa) on the one hand (Asongu &

Nwachukwu, 2016a) and on the other hand countries of the BRICS (Brazil, Russia, India, China & South Africa) and MINT (Mexico, Indonesia, Nigeria & Turkey) countries (Asongu, 2016a).

*3.2.2 Generalised Method of Moments*

There are six fundamental justifications for the adoption of the GMM empirical strategy. Whereas the first-two consists of requirements for adopting the strategy, the last-four are advantages that are associated with the strategy. First, the procedure of estimation is a plausible fit because governance is persistent. In essence, the correlation between the governance variables and their corresponding first lagged values is higher than the rule of thumb threshold of 0.800 for persistence in a dependent variable. Second, the number of years per country (T) is lower than the number of countries (N). Therefore, the T(16)<N(51) condition for GMM application is also satisfied. Third, the estimation technique enables the control for endogeneity in all regressors. Fourth, cross-country differences are not eliminated with the technique. Fifth, biases from small samples are accounted for by the system estimator. Sixth, it is principally for this fifth reason that Bond et al. (2001, pp. 3-4) have recommended that the *system* GMM estimator (Arellano & Bover, 1995; Blundell & Bond, 1998) is a better fit compared to the *difference* estimator from Arellano and Bond (1991).

In this study, we adopt the Roodman (2009 a; b) extension of Arellano and Bover (1995) that employs forward orthogonal deviations in place of first differences. The approach has been established to: (i) limit the proliferation of instruments and (ii) control for cross-country dependence (see Baltagi, 2008; Love & Zicchino, 2006). A *two-step* procedure is adopted because it accounts for heteroscedasticity because the *one-step* procedure is homoscedasticity-consistent.

The following equations in levels (1) and first difference (2) summarize the standard system GMM estimation procedure.

$$Gov_{i,t} = \sigma_0 + \sigma_1 Gov_{i,t-\tau} + \sigma_2 Glob_{i,t} + \sum_{h=1}^{4} \delta_h W_{h,i,t-\tau} + \eta_i + \xi_t + \varepsilon_{i,t} \quad (1)$$

$$Gov_{i,t} - Gov_{i,t-\tau} = \sigma_0 + \sigma_1 (Gov_{i,t-\tau} - Gov_{i,t-2\tau}) + \sigma_2 (Glob_{i,t} - Glob_{i,t-\tau}) + \sum_{h=1}^{4} \delta_h (W_{h,i,t-\tau} - W_{h,i,t-2\tau}) + (\xi_t - \xi_{t-\tau}) + \varepsilon_{i,t-\tau} \quad (2)$$

Where: $Gov_{i,t}$ is governance (political, economic, institutional and general) of country $i$ at period $t$; $\alpha$ is a constant; $\tau$ represents tau; $Glob$, denotes globalisation which may be

economic, political, social or general; $W$ is the vector of control variables (*GDP growth, foreign aid, public investment* and *inflation*), $\eta_i$ is the country-specific effect, $\xi_t$ is the time-specific constant and $\varepsilon_{i,t}$ the error term.

*3.2.3 Identification and exclusion restriction*

Following recent literature, all the independent variables are treated as predetermined or suspected endogenous variables (Love & Zicchino, 2006; Dewan & Ramaprasad, 2014; Asongu & De Moor, 2016). Therefore the *gmmstyle* is employed for them. Hence, only years are considered as exogenous and the procedure for treating the *ivstyle* (years) is 'iv(years, eq(diff))' because it is not feasible for years to be endogenous in first-difference (see Roodman, 2009b).

To tackle the issue of simultaneity, lagged regressors are used as instruments for forward-differenced indicators. Helmet transformations are also performed for the regressors in order to remove fixed effects that are likely to influence the examined relationships (Arellano & Bover, 1995; Love & Zicchino, 2006). These transformations consist of forward mean-differencing of the variables: as opposed to the process of deducting previous observations from present observations (see Roodman, 2009b, p. 104), the mean of all future observations is subtracted from the variables. Such transformation enables parallel or orthogonal conditions between forward-differenced variables and lagged values. Regardless of the number of lags, data loss is minimised, with the exception of the last observation in cross sections, the underlying transformation are computable for all observations "*And because lagged observations do not enter the formula, they are valid as instruments*" (Roodman (2009b, p. 104).

In the study, it is further argued that '*years*' which are considered as strictly exogenous influence governance exclusively via the endogenous explaining variables. As shown by Asongu and De Moor (2016), the statistical validity of this his exclusion restriction is examined with the Difference in Hansen Test (DHT) for the exogeneity of instruments. Accordingly, the null hypothesis of the DHT is the position that the 'years' (or instruments) are strictly exogenous. Hence, the alternative hypothesis should be rejected for the instruments to explain governance exclusively via the endogenous explaining variables. It is important to note that, in the standard instrumental variable (IV) technique, the validity of instruments is confirmed by the failure to reject the null hypothesis of the Sargan Over-

identifying Restrictions (OIR) test, which is an indication that the instruments do not explain the governance beyond engaged channels of explaining variables.

Whereas this information criterion is used when the IV strategy is employed in the literature (see Beck et al., 2003; Asongu & Nwachukwu, 2016b), the DHT in the GMM strategy is employed to investigate if years exhibit strict exogeneity, by not explaining the outcome variable beyond the proposed endogenous explaining variables or channels. Therefore, in the section that follows the findings reported would confirm the validity of the exclusion restriction if the null hypotheses of DHT corresponding to IV (year, eq(diff)) are not rejected.

## 4. Empirical results and discussion of results

### 4.1 Presentation of results

Table 2, Table 3, Table 4 and Table 5 respectively present findings for political governance, economic governance, institutional governance and general governance. Table 2, Table 3, Table 4 and Table 5 also respectively investigate Hypothesis 1, Hypothesis 2, Hypothesis 3 and Hypothesis 4. There are four specifications corresponding to each globalisation dynamic for each governance dimension. Consistent with recent literature on the application of the GMM with forward orthogonal deviations, four information criteria are used to investigate the validity of estimated models[3].

The following findings can be established for Table 2 on the linkages between political governance and globalisation. (i) Only social globalisation significantly improves political stability. (ii) Only economic globalisation does not significantly increase voice & accountability and political governance. (iii) The significant control variables have expected signs for the most part.

The following findings can be established for Table 3 on the linkages between economic governance and globalisation. (i) Only economic globalisation significantly improves regulation quality. (ii) Social globalisation and general globalisation significantly

[3]"*Four main information criteria are used to assess the validity of the estimated models. First, the null hypothesis of the second-order Arellano and Bond autocorrelation test (AR(2)) in difference for the absence of autocorrelation in the residuals should not be rejected. Second the Sargan and Hansen OIR tests should not be significant because their null hypotheses are the positions that instruments are valid or not correlated with the error terms. In essence, whereas the Sargan OIR test is not robust but not weakened by instruments, the Hansen OIR is robust but weakened by instruments. In order to restrict identification or limit the proliferation of instruments, we have ensured that instruments are lower than the number of cross-sections in most specifications. Third, the DHT for exogeneity of instruments is also employed to assess the validity of results from the Hansen OIR test. Fourth, a Fischer test for the joint validity of estimated coefficients is also provided*" (Asongu & De Moor, 2016, p. 9).

increase government effectiveness. (iii) Economic globalisation and general globalisation significantly improve economic governance.

The following findings can be established for Table 4 on the linkages between institutional governance and globalisation. While only social globalisation improves corruption-control, the effects of globalisation dynamics on the rule of law and institutional governance are not significant. In Table 5 on the linkages between general governance and globalisation, the effects of social globalisation and general globalisation are significantly positive.

**Table 2: Political Governance and Globalisation (for Hypothesis 1)**

| | **Dependent Variable: Political Governance** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Political Stability (PS)** | | | | **Voice & Accountability (VA)** | | | | **Political Governance (Polgov)** | | | |
| | Polglob | Ecoglob | Socioglob | Glob | Polglob | Ecoglob | Socioglob | Glob | Polglob | Ecoglob | Socioglob | Glob |
| Constant | -0.280 | -0.036 | **-0.438*** ** | -0.577 | -0.102 | -0.044 | **-0.298*** ** | **-0.550*** ** | **-0.206*** | 0.052 | **-0.559*** ** | **-0.581*** ** |
| | (0.162) | (0.834) | **(0.002)** | (0.136) | (0.172) | (0.709) | **(0.001)** | **(0.000)** | **(0.090)** | (0.778) | **(0.002)** | **(0.007)** |
| PS (-1) | **0.817*** ** | **0.964*** ** | **0.752*** ** | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| | **(0.000)** | **(0.000)** | **(0.000)** | | | | | | | | | |
| VA (-1) | --- | --- | --- | --- | **1.019*** ** | **0.841*** ** | **0.992*** ** | **1.004*** ** | --- | --- | --- | --- |
| | | | | | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** | | | | |
| Polgov(-1) | --- | --- | --- | --- | --- | --- | --- | --- | **0.958*** ** | **0.893*** ** | **0.881*** ** | **0.919*** ** |
| | | | | | | | | | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** |
| Political Glob. | 0.003 | --- | --- | --- | **0.002** ** | --- | --- | --- | **0.004*** ** | --- | --- | --- |
| | (0.195) | | | | **(0.028)** | | | | **(0.004)** | | | |
| Economic Glob. | --- | -0.001 | --- | --- | --- | -0.0002 | --- | --- | --- | -0.001 | --- | --- |
| | | (0.600) | | | | (0.908) | | | | (0.632) | | |
| Social Glob. | --- | --- | **0.008** ** | --- | --- | --- | **0.007*** ** | --- | --- | --- | **0.016*** ** | --- |
| | | | **(0.016)** | | | | **(0.003)** | | | | **(0.001)** | |
| Globalisation(Glob) | --- | --- | --- | 0.008 | --- | --- | --- | **0.012*** ** | --- | --- | --- | **0.015*** ** |
| | | | | (0.243) | | | | **(0.000)** | | | | **(0.001)** |
| GDP growth | **0.006*** ** | **0.010*** ** | **0.007*** ** | **0.007*** ** | **0.002*** | 0.002 | **0.003** ** | **0.003*** | **0.006*** ** | **0.011*** ** | **0.008*** ** | **0.004** ** |
| | **(0.001)** | **(0.000)** | **(0.000)** | **(0.000)** | **(0.090)** | (0.101) | **(0.017)** | **(0.055)** | **(0.005)** | **(0.000)** | **(0.001)** | **(0.048)** |
| Foreign aid | **-0.001** ** | 0.0003 | -0.0006 | **-0.001** ** | **0.0008*** | **0.001** ** | **0.002*** ** | **0.001** ** | 0.0005 | 0.001 | **0.003*** ** | -0.000 |
| | **(0.035)** | (0.706) | (0.481) | **(0.036)** | **(0.061)** | **(0.013)** | **(0.001)** | **(0.023)** | (0.935) | (0.285) | **(0.003)** | (0.996) |
| Public Invt. | 0.007 | 0.002 | 0.0006 | 0.006 | 0.001 | **-0.006** ** | -0.0007 | **0.005*** ** | 0.003 | -0.002 | -0.001 | **0.007** ** |
| | (0.136) | (0.704) | (0.905) | (0.254) | (0.581) | **(0.035)** | (0.663) | **(0.007)** | (0.196) | (0.648) | (0.754) | **(0.041)** |
| Inflation | **-0.000*** ** | **-0.000** ** | **-0.000*** ** | **-0.000*** ** | 0.000 | **-0.000*** ** | -0.000 | **0.000*** | **-0.000*** ** | **-0.000*** ** | **-0.000*** ** | **-0.000*** ** |
| | **(0.000)** | **(0.014)** | **(0.000)** | **(0.000)** | (0.141) | **(0.000)** | (0.656) | **(0.096)** | **(0.003)** | **(0.007)** | **(0.000)** | **(0.006)** |
| AR(1) | (0.000) | (0.001) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.001) | (0.000) | (0.000) |
| AR(2) | **(0.640)** | **(0.525)** | **(0.548)** | **(0.650)** | **(0.545)** | **(0.443)** | **(0.720)** | **(0.319)** | **(0.666)** | **(0.868)** | **(0.524)** | **(0.824)** |
| Sargan OIR | **(0.285)** | **(0.193)** | **(0.677)** | **(0.400)** | **(0.242)** | (0.076) | **(0.716)** | **(0.385)** | **(0.149)** | (0.040) | **(0.473)** | **(0.160)** |
| Hansen OIR | **(0.238)** | **(0.336)** | **(0.497)** | **(0.427)** | **(0.312)** | **(0.263)** | **(0.595)** | **(0.504)** | (0.085) | **(0.231)** | **(0.267)** | (0.061) |
| DHT for instruments (a)Instruments in levels | | | | | | | | | | | | |
| H excluding group | **(0.792)** | **(0.832)** | **(0.666)** | **(0.761)** | **(0.645)** | **(0.510)** | **(0.557)** | **(0.575)** | **(0.821)** | **(0.704)** | **(0.612)** | **(0.727)** |
| Dif(null, H=exogenous) | **(0.101)** | **(0.167)** | **(0.352)** | **(0.246)** | **(0.190)** | **(0.190)** | **(0.522)** | **(0.406)** | **(0.024)** | **(0.114)** | **(0.163)** | (0.020) |
| (b) IV (years, eq(diff)) | | | | | | | | | | | | |
| H excluding group | **(0.793)** | **(0.347)** | **(0.570)** | **(0.741)** | (0.060) | **(0.471)** | **(0.341)** | **(0.296)** | **(0.516)** | **(0.178)** | **(0.245)** | **(0.657)** |
| Dif(null, H=exogenous) | **(0.048)** | **(0.386)** | **(0.357)** | **(0.168)** | **(0.967)** | **(0.163)** | **(0.789)** | **(0.712)** | (0.025) | **(0.114)** | **(0.373)** | (0.009) |
| Fisher | **219.82*** ** | **178.46*** ** | **206.83*** ** | **219.25*** ** | **3048.4*** ** | **403.01*** ** | **1424.7*** ** | **881.53*** ** | **1605.0*** ** | **495.25*** ** | **1314.9*** ** | **2211.4*** ** |
| Instruments | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Countries | 45 | 41 | 45 | 45 | 45 | 41 | 45 | 45 | 45 | 41 | 45 | 45 |
| Observations | 332 | 308 | 332 | 332 | 332 | 308 | 332 | 332 | 332 | 308 | 332 | 332 |

*,**,***: significance levels of 10%, 5% and 1% respectively. DHT: Difference in Hansen Test for Exogeneity of Instruments' Subsets. Dif: Difference. OIR: Over-identifying Restrictions Test. The significance of bold values is twofold. 1) The significance of estimated coefficients and the Fisher statistics. 2) The failure to reject the null hypotheses of: a) no autocorrelation in the AR(1) and AR(2) tests and; b) the validity of the instruments in the Sargan OIR test.

## Table 3: Economic Governance and Globalisation (for Hypothesis 2)

| | **Economic Governance (Dependent Variable)** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Regulation Quality (RQ)** | | | | **Government Effectiveness (GE)** | | | | **Economic Governance (Ecogov)** | | | |
| | Polglob | Ecoglob | Socioglob | Glob | Polglob | Ecoglob | Socioglob | Glob | Polglob | Ecoglob | Socioglob | Glob |
| Constant | 0.037 | -0.297 | -0.132 | **-0.186*** | -0.124 | **-0.172*** | **-0.301**** | **-0.227**** | -0.067 | **-0.171*** | -0.061 | -0.172 |
| | (0.648) | (0.001) | (0.159) | **(0.096)** | (0.132) | **(0.085)** | **(0.013)** | **(0.040)** | (0.315) | **(0.090)** | (0.674) | (0.322) |
| RQ (-1) | **0.844***** | **0.848***** | **0.866***** | **0.815***** | --- | --- | --- | --- | --- | --- | --- | --- |
| | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** | | | | | | | | |
| GE (-1) | --- | --- | --- | --- | **0.874***** | **0.841***** | **0.881***** | **0.901***** | --- | --- | --- | --- |
| | | | | | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** | | | | |
| Ecogov(-1) | --- | --- | --- | --- | --- | --- | --- | --- | **0.915***** | **0.951***** | **0.887***** | **0.947***** |
| | | | | | | | | | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** |
| Political Glob. | -0.001 | --- | --- | --- | 0.001 | --- | --- | --- | 0.001 | --- | --- | --- |
| | (0.138) | | | | (0.375) | | | | (0.240) | | | |
| Economic Glob. | --- | **0.004**** | --- | --- | --- | 0.001 | --- | --- | --- | **0.003**** | --- | --- |
| | | **(0.028)** | | | | (0.383) | | | | **(0.044)** | | |
| Social Glob. | --- | --- | 0.0007 | --- | --- | --- | **0.006**** | ---- | --- | --- | 0.003 | --- |
| | | | (0.765) | | | | **(0.024)** | | | | (0.375) | |
| Globalisation(Glob) | --- | --- | --- | 0.001 | --- | --- | --- | **0.005*** | --- | --- | --- | **0.947***** |
| | | | | (0.470) | | | | **(0.062)** | | | | **(0.000)** |
| Control variables | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| AR(1) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) |
| AR(2) | **(0.167)** | **(0.169)** | **(0.142)** | **(0.151)** | **(0.139)** | **(0.148)** | **(0.125)** | **(0.131)** | **(0.131)** | **(0.128)** | **(0.134)** | **(0.111)** |
| Sargan OIR | **(0.505)** | (0.035) | **(0.124)** | **(0.503)** | **(0.458)** | **(0.215)** | **(0.799)** | **(0.416)** | **(0.282)** | (0.060) | **(0.291)** | **(0.164)** |
| Hansen OIR | **(0.414)** | **(0.203)** | **(0.590)** | **(0.522)** | **(0.494)** | **(0.625)** | **(0.729)** | **(0.619)** | **(0.206)** | **(0.164)** | **(0.254)** | **(0.240)** |
| DHT for instruments | | | | | | | | | | | | |
| (a)Instruments in levels | | | | | | | | | | | | |
| H excluding group | **(0.463)** | **(0.223)** | **(0.236)** | **(0.434)** | **(0.595)** | **(0.594)** | **(0.542)** | **(0.606)** | **(0.376)** | **(0.635)** | **(0.269)** | **(0.407)** |
| Dif(null, H=exogenous) | **(0.368)** | **(0.267)** | **(0.773)** | **(0.513)** | **(0.384)** | **(0.535)** | **(0.699)** | **(0.520)** | **(0.182)** | (0.083) | **(0.301)** | **(0.206)** |
| (b) IV (years, eq(diff)) | | | | | | | | | | | | |
| H excluding group | **(0.980)** | **(0.600)** | **(0.476)** | **(0.830)** | **(0.413)** | **(0.417)** | **(0.413)** | **(0.329)** | **(0.938)** | **(0.736)** | **(0.271)** | **(0.708)** |
| Dif(null, H=exogenous) | (0.050) | (0.071) | **(0.596)** | **(0.189)** | **(0.515)** | **(0.706)** | **(0.857)** | **(0.802)** | (0.019) | (0.032) | **(0.314)** | (0.066) |
| Fisher | **3092.9***** | **3999.0***** | **4581.9***** | **2266.1***** | **678.07***** | **892.87***** | **746.56***** | **479.02***** | **1288.2***** | **738.85***** | **1097.2***** | **1424.6***** |
| Instruments | 30 | 30 | 30 | 30 | 31 | 31 | 31 | 31 | 30 | 30 | 30 | 30 |
| Countries | 45 | 41 | 45 | 45 | 45 | 41 | 45 | 45 | 45 | 41 | 45 | 45 |
| Observations | 332 | 308 | 332 | 332 | 365 | 340 | 365 | 365 | 332 | 308 | 332 | 332 |

*,**,***: significance levels of 10%, 5% and 1% respectively. DHT: Difference in Hansen Test for Exogeneity of Instruments' Subsets. Dif: Difference. OIR: Over-identifying Restrictions Test. The significance of bold values is twofold. 1) The significance of estimated coefficients and the Fisher statistics. 2) The failure to reject the null hypotheses of: a) no autocorrelation in the AR(1) and AR(2) tests and; b) the validity of the instruments in the Sargan OIR test.

## Table 4: Institutional Governance and Globalisation (for Hypothesis 3)

**Panel B: Institutional Governance (Dependent Variable)**

| | **Corruption-Control (CC)** | | | | **Rule of Law (RL)** | | | | **Institutional Governance (Instgov)** | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Polglob | Ecoglob | Socioglob | Glob | Polglob | Ecoglob | Socioglob | Glob | Polglob | Ecoglob | Socioglob | Glob |
| Constant | **-0.269**** | -0.053 | **-0.300**** | -0.364 | **-0.153**** | -0.133 | -0.105 | -0.225 | -0.239 | 0.016 | -0.305 | -0.332 |
| | **(0.046)** | (0.676) | **(0.020)** | (0.115) | **(0.041)** | (0.255) | (0.443) | (0.121) | (0.240) | (0.942) | (0.187) | (0.256) |
| CC (-1) | **0.832***** | **0.797***** | **0.877***** | **0.805***** | --- | --- | --- | --- | --- | --- | --- | --- |
| | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** | | | | | | | | |
| RL (-1) | --- | --- | --- | --- | **0.948***** | **0.867***** | 0.001 | **0.961***** | --- | --- | --- | --- |
| | | | | | **(0.000)** | **(0.000)** | (0.685) | **(0.000)** | | | | |
| Instgov(-1) | --- | --- | --- | --- | --- | --- | --- | --- | **0.927***** | **0.895***** | **0.907***** | **0.918***** |
| | | | | | | | | | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** |
| Political Glob. | 0.002 | --- | --- | --- | 0.001 | --- | --- | --- | 0.003 | --- | --- | --- |
| | (0.182) | | | | (0.110) | | | | (0.269) | | | |
| Economic Glob. | --- | -0.002 | --- | --- | --- | 0.0009 | --- | --- | --- | 0.0004 | --- | --- |
| | | (0.318) | | | | (0.663) | | | | (0.928) | | |
| Social Glob. | --- | --- | **0.007**** | --- | --- | --- | 0.001 | --- | --- | --- | 0.007 | --- |
| | | | **(0.028)** | | | | (0.685) | | | | (0.303) | |
| Globalisation(Glob) | --- | --- | --- | 0.005 | --- | --- | --- | 0.003 | --- | --- | --- | 0.007 |
| | | | | (0.244) | | | | (0.246) | | | | (0.262) |
| Control Variables | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| AR(1) | (0.000) | (0.000) | (0.000) | (0.000) | (0.000) | (0.001) | (0.000) | (0.000) | (0.000) | (0.001) | (0.000) | (0.000) |
| AR(2) | **(0.500)** | **(0.644)** | **(0.596)** | **(0.523)** | **(0.434)** | **(0.430)** | **(0.402)** | **(0.443)** | **(0.281)** | **(0.330)** | **(0.293)** | **(0.279)** |
| Sargan OIR | **(0.771)** | **(0.791)** | **(0.356)** | **(0.814)** | (0.029) | (0.008) | (0.093) | (0.014) | **(0.277)** | **(0.205)** | **(0.178)** | **(0.246)** |
| Hansen OIR | **(0.181)** | **(0.465)** | **(0.279)** | **(0.414)** | **(0.296)** | **(0.135)** | **(0.385)** | **(0.280)** | **(0.376)** | **(0.498)** | **(0.345)** | **(0.256)** |
| DHT for instruments | | | | | | | | | | | | |
| (a)Instruments in levels | | | | | | | | | | | | |
| H excluding group | **(0.796)** | **(0.865)** | **(0.696)** | **(0.897)** | **(0.187)** | **(0.063)** | **(0.425)** | **(0.136)** | **(0.416)** | **(0.491)** | **(0.937)** | **(0.582)** |
| Dif(null, H=exogenous) | (0.069) | **(0.236)** | **(0.150)** | **(0.185)** | **(0.444)** | **(0.378)** | **(0.358)** | **(0.495)** | **(0.356)** | **(0.447)** | **(0.128)** | **(0.162)** |
| (b) IV (years, eq(diff)) | | | | | | | | | | | | |
| H excluding group | **(0.248)** | **(0.423)** | **(0.134)** | **(0.275)** | **(0.112)** | **(0.820)** | **(0.270)** | **(0.208)** | **(0.277)** | **(0.828)** | **(0.412)** | **(0.413)** |
| Dif(null, H=exogenous) | **(0.218)** | **(0.463)** | **(0.646)** | **(0.591)** | **(0.758)** | **(0.017)** | **(0.550)** | **(0.462)** | **(0.526)** | **(0.172)** | **(0.301)** | **(0.190)** |
| Fisher | **534.05***** | **443.80***** | **890.26***** | **711.43***** | **3129.7***** | **874.54***** | **2559.8***** | **1739.0***** | **1462.4***** | **469.22***** | **1611.4***** | **742.47***** |
| Instruments | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 | 30 |
| Countries | 45 | 41 | 45 | 45 | 45 | 41 | 45 | 45 | 45 | 41 | 45 | 45 |
| Observations | 332 | 308 | 332 | 332 | 332 | 308 | 332 | 332 | 332 | 308 | 332 | 332 |

*,**,***: significance levels of 10%, 5% and 1% respectively. DHT: Difference in Hansen Test for Exogeneity of Instruments' Subsets. Dif: Difference. OIR: Over-identifying Restrictions Test. The significance of bold values is twofold. 1) The significance of estimated coefficients and the Fisher statistics. 2) The failure to reject the null hypotheses of: a) no autocorrelation in the AR(1) and AR(2) tests and; b) the validity of the instruments in the Sargan OIR test.

## Table 5: General Governance and Globalisation (for Hypothesis 4)

| | Dependent variable: General Governance (G.Gov) | | | |
|---|---|---|---|---|
| | Polglob | Ecoglob | Socioglob | Glob |
| Constant | -0.149 | -0.007 | **-0.526*** | -0.464 |
| | (0.367) | (0.977) | **(0.051)** | (0.122) |
| G.Gov (-1) | **0.976*****| **0.939***** | **0.960***** | **0.951***** |
| | **(0.000)** | **(0.000)** | **(0.000)** | **(0.000)** |
| Political Glob. | 0.002 | --- | --- | --- |
| | (0.249) | | | |
| Economic Glob. | --- | 0.0004 | --- | --- |
| | | (0.936) | | |
| Social Glob. | --- | --- | **0.015**** | ---- |
| | | | **(0.041)** | |
| Globalisation(Glob) | --- | --- | --- | **0.009***** |
| | | | | **(0.000)** |
| Control Variables | Yes | Yes | Yes | Yes |
| AR(1) | (0.000) | (0.000) | (0.000) | (0.000) |
| AR(2) | **(0.190)** | **(0.312)** | **(0.186)** | **(0.208)** |
| Sargan OIR | **(0.356)** | (0.072) | **(0.192)** | **(0.295)** |
| Hansen OIR | **(0.128)** | **(0.268)** | **(0.108)** | (0.051) |
| | | | | |
| DHT for instruments | | | | |
| (a)Instruments in levels | | | | |
| H excluding group | **(0.604)** | **(0.506)** | **(0.490)** | **(0.601)** |
| Dif(null, H=exogenous) | (0.063) | **(0.196)** | (0.065) | (0.020) |
| (b) IV (years, eq(diff)) | | | | |
| H excluding group | **(0.219)** | **(0.248)** | **(0.123)** | **(0.367)** |
| Dif(null, H=exogenous) | **(0.157)** | **(0.370)** | **(0.236)** | (0.022) |
| Fisher | **6750.74***** | **8584.29***** | **9145.62***** | **4087.33***** |
| Instruments | 30 | 30 | 30 | 30 |
| Countries | 45 | 41 | 45 | 45 |
| Observations | 332 | 308 | 332 | 332 |

*,**,***: significance levels of 10%, 5% and 1% respectively. DHT: Difference in Hansen Test for Exogeneity of Instruments' Subsets. Dif: Difference. OIR: Over-identifying Restrictions Test. The significance of bold values is twofold. 1) The significance of estimated coefficients and the Fisher statistics. 2) The failure to reject the null hypotheses of: a) no autocorrelation in the AR(1) and AR(2) tests and; b) the validity of the instruments in the Sargan OIR test.

### 4.2 Further discussion of results and policy implications

*4.2.1 Retrospect to tested hypothesis, theoretical contributions and policy implications*

We set out to test four hypotheses that are linked to each dimension of governance, namely: political governance, economic governance, institutional governance and general governance for *Hypothesis* 1, *Hypothesis* 2, *Hypothesis* 3 and *Hypothesis* 4 respectively. From a broad perspective, with the exception of *Hypothesis* 3 that is only mildly confirmed, all the tested hypotheses are validated. However, the incidences of globalisation on the governance variables differ in terms of specificities of globalisation and governance. The specificities of globalisation variables cannot be overly emphasised because they are obtained from Dreher et al. (2010). Conversely, the theoretical contributions of this study are apparent in the differences in effects between composite governance variables obtained by means of principal component analysis and their constituents. The theoretical contribution builds on conceptual clarifications. As discussed in the introduction, it is conceptually flawed to use concepts of governance (political, economic, institutional, *inter alia*) without some statistical validity. We have consistently noticed that when the globalisation dynamic significantly affects a composite indicator of governance, the effect on constituent governance indicators is not consistent. In the same vein, the positive effects on constituent indicators of a composite governance variable may not be reflected in the composite governance variable. In the paragraphs that follow, we engage specific findings by articulating three main peculiarities, notably: (i) political governance is driven by voice and accountability compared to political stability and (ii) economic governance is driven by both government effectiveness and regulation quality from specific angles of globalisation (more insights into *Hypothesis 2*)

First, the fact that in the globalisation-'political governance' nexus, political governance is driven fundamentally by 'voice & accountability' (compared to political stability) can be explained on two counts. On the one hand, the Washington Consensus has fundamentally articulated the concept of governance to reflect political governance and democratic processes. Hence, it is not surprising that the criteria used to collect data for the globalisation variables may be framed toward influencing more of 'voice and accountability' than of political stability/non violence. Hence, the theoretical constructs of globalisation and democratic processes emphasising 'voice & accountability' overlap by design. In addition to the six meanings of governance clearly discussed by the influential paper of Rhodes (1996), the seventh meaning of governance we are discussing is what escaped Rhodes' attention. Simply put, governance was a 'code word' used to promote democracy. This is the reason why indicators (such as voice and accountability) used by Kaufmann and his collaborators in

the various 'governance matters' publications have been for all practical purposes measures of democracy (Kaufmann et al., 2010a; b). The interested reader can also find more insights from criticism by Kurtz and Schrank (2007a; b). This narrative which consistent with the definition of the Washington Consensus (WC) which is designed to prioritise political governance, contrary the Beijing Model (BM) which prioritises economic governance: "... *defines the WC as liberal democracy, private capitalism, and priority in political rights, the BM is defined as deemphasized democracy, state capitalism, and priority in economic rights*". (Asongu, 2016b, p.354; Asongu & Ssozi, 2016).

On the other hand and in the light of the clarifications, the more significant connection between 'voice and accountability' and political governance can be explained by the fact that countries espousing the BM could be considered as reflecting low levels of political governance despite enjoying comparatively higher levels of political stability/non violence. To put this point into greater perspective, not all dimensions of political governance as measured by Kaufmann and co-authors directly reflect democratic quality. For instance, a strong dictatorship may enjoy substantial political stability with little or no 'voice and accountability', while liberal democracies may enjoy strong 'voice and accountability' simultaneously with substantial political instability.

Second, the fact that economic governance is driven both by government effectiveness and regulation quality partly substantiates the narrative on political governance and the priority of the Washington Consensus discussed in the preceding paragraph. In other words, the globalisation process and measurement was not designed to prioritise one aspect of economic governance over the other. It is important to note that political governance is the election and replacement of political leaders while economic governance is the formulation and implementation of policies that deliver public commodities. As we have established: (i) the positive effect of economic globalisation on economic governance is driven by regulation quality while and (ii) the positive impact of general globalisation on economic governance is driven by government effectiveness.

## 5. Conclusion and further research directions

In this study, we have assessed the effect of globalisation on governance using in 51 African countries for the period 1996-2011. Ten bundled and unbundled governance indicators are used, namely: political governance (consisting of political stability/non violence and voice & accountability), economic governance (encompassing regulation quality and government

effectiveness), institutional governance (entailing corruption-control and the rule of law) and general governance (consisting of political, economic and institutional governances). Political, economic, social and general globalisation variables are used and the empirical evidence is based on Generalised Method of Moments.

The following findings have been established. First, on political governance, only social globalisation improves political stability while only economic globalisation does not increase voice & accountability and political governance. Second, with regard to economic governance: (i) only economic globalisation significantly promote regulation quality; (ii) social globalisation and general globalisation significantly advance government effectiveness and (iii) economic globalisation and general globalisation significantly promote economic governance. Third, as concerns institutional governance, whereas only social globalisation improves corruption-control, the effects of globalisation dynamics on the rule of law and institutional governance are not significant. Fourth, the impacts of social globalisation and general globalisation are positive on general governance.

It in the light of the above: (i) political governance is driven by voice and accountability compared to political stability and (ii) economic governance is promoted by both regulation quality and government effectiveness from specific globalisation angles. Theoretical contributions and policy implications have been discussed.

Future research can improve extant literature by assessing if established linkages withstand empirical scrutiny when the nexuses are investigated within the some fundamental characteristics of Africa governance, namely: legal origins, income levels, landlockedness, resource wealth, *inter alia*. Moreover, investigating the established linkages throughout the conditional distributions of governance may provide more insights into the nexuses because blanket globalisation-governance policies may not be effective unless they are contingent on initial levels of governance and tailored differently across countries with low, intermediate and high levels of governance.

## Appendix

### 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 Governance | Polgov | 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- | CC | "Control of corruption (estimate): captures perceptions of the | World Bank (WGI) |

| | | | |
|---|---|---|---|
| Control | | 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". | |
| 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 internatonal orgnisations, participation in UN security". | Dreher et al. (2010) |
| Economic Globalisation | Ecoglob | "Overall economic globalisation (considers both the flow and the restrictions in a given country to derive this). The higher, the better social globalisation". | Dreher et al. (2010) |
| Social Globalisation | Socglob | "Overall scores for the countries extent of social globalisation. The higher the better socially globalised the country". | Dreher et al. (2010) |
| Globalisation | Glob | This is an overall index that contains economic globalisation, social globalisation and political globalisation | Dreher et al. (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 Grosss) | 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 | 58.142 | 18.323 | 19.958 | 94.164 | 816 |
| Economic Globalisation | 44.625 | 13.095 | 12.301 | 84.949 | 688 |
| Social Globalisation | 28.519 | 11.247 | 5.773 | 65.033 | 816 |

| | | | | | |
|---|---|---|---|---|---|
| Globalisation | 41.376 | 10.133 | 17.514 | 68.523 | 816 |
| 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.

**Appendix 3: Correlation matrix for GMM (uniform sample size : 329)**

| Political Governance | | | Economic Governance | | | Institutional Governance | | | | Globalisation | | | | Control Variables | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| PS | VA | Polgov | GE | RQ | Ecogov | CC | RL | Instgov | G.gov | Polglob | Ecoglob | Socglob | Glob | SSE | Mobile | GDPg | Popg | Aid | Pub.Ivt. | Inflation | |
| 1.000 | 0.690 | 0.911 | 0.678 | 0.712 | 0.460 | 0.736 | 0.792 | 0.785 | 0.865 | -0.129 | 0.363 | 0.561 | 0.393 | 0.402 | 0.245 | -0.078 | -0.342 | -0.143 | 0.136 | -0.189 | PS |
| | 1.000 | 0.921 | 0.690 | 0.735 | 0.425 | 0.697 | 0.762 | 0.752 | 0.857 | 0.015 | 0.373 | 0.477 | 0.430 | 0.411 | 0.206 | -0.060 | -0.211 | -0.078 | 0.141 | -0.100 | VA |
| | | 1.000 | 0.740 | 0.787 | 0.482 | 0.774 | 0.843 | 0.833 | 0.936 | -0.046 | 0.381 | 0.555 | 0.442 | 0.431 | 0.246 | -0.073 | -0.291 | -0.108 | 0.147 | -0.154 | Polgov |
| | | | 1.000 | 0.876 | 0.647 | 0.865 | 0.887 | 0.905 | 0.889 | 0.132 | 0.422 | 0.720 | 0.631 | 0.661 | 0.368 | -0.038 | -0.475 | -0.295 | 0.054 | -0.127 | GE |
| | | | | 1.000 | 0.736 | 0.814 | 0.858 | 0.862 | 0.912 | 0.138 | 0.428 | 0.727 | 0.640 | 0.605 | 0.387 | -0.091 | -0.386 | -0.342 | -0.380 | -0.220 | RQ |
| | | | | | 1.000 | 0.552 | 0.611 | 0.597 | 0.635 | 0.199 | 0.304 | 0.591 | 0.541 | 0.407 | 0.307 | -0.084 | -0.325 | -0.262 | -0.274 | -0.222 | Ecogov |
| | | | | | | 1.000 | 0.877 | 0.971 | 0.917 | -0.080 | 0.411 | 0.679 | 0.499 | 0.596 | 0.311 | -0.096 | -0.513 | -0.213 | 0.217 | -0.147 | CC |
| | | | | | | | 1.000 | 0.965 | 0.953 | 0.045 | 0.409 | 0.741 | 0.590 | 0.625 | 0.354 | -0.058 | -0.471 | -0.250 | 0.123 | -0.170 | RL |
| | | | | | | | | 1.000 | 0.964 | -0.020 | 0.419 | 0.728 | 0.557 | 0.629 | 0.341 | -0.077 | -0506 | -0.240 | 0.125 | -0.163 | Instgov |
| | | | | | | | | | 1.000 | 0.005 | 0.431 | 0.705 | 0.565 | 0.581 | 0.333 | -0.083 | -0.427 | -0.219 | 0.098 | -0.184 | G.gov |
| | | | | | | | | | | 1.000 | -0.117 | 0.099 | 0.486 | 0.192 | 0.245 | -0.014 | 0.057 | -0.232 | -0.108 | -0.099 | Polglob |
| | | | | | | | | | | | 1.000 | 0.525 | 0.715 | **0.585** | **0.509** | 0.048 | -0.476 | -0.419 | 0.012 | 0.198 | Ecoglob |
| | | | | | | | | | | | | 1.000 | 0.802 | **0.792** | 0.551 | -0.168 | **-0.734** | **-0.512** | -0.141 | -0.156 | Socglob |
| | | | | | | | | | | | | | 1.000 | **0.780** | **0.652** | -0.062 | **-0.570** | **-0.580** | -0.115 | -0.021 | Glob |
| | | | | | | | | | | | | | | 1.000 | **0.602** | -0.120 | **-0.693** | -0.580 | -0.046 | -0.092 | SSE |
| | | | | | | | | | | | | | | | 1.000 | -0.090 | -0.421 | -0.348 | -0.020 | -0.083 | Mobile |
| | | | | | | | | | | | | | | | | 1.000 | 0.195 | 0.073 | 0.216 | 0.023 | GDPg |
| | | | | | | | | | | | | | | | | | 1.000 | 0.476 | 0.063 | 0.079 | Popg |
| | | | | | | | | | | | | | | | | | | 1.000 | 0.288 | 0.099 | Aid |
| | | | | | | | | | | | | | | | | | | | 1.000 | 0.018 | Pub. Ivt. |
| | | | | | | | | | | | | | | | | | | | | 1.000 | Inflation |

PS: Political Stability/Non violence. 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. Polgov: Political Globalisation. Ecoglob: Economic Globalisation. Socglob: Social Globalisation. Glob: Globalisation. SSE: Secondary School Enrolment. Mobile: Mobile Phone Penetration. GDPg: Gross Domestic Product growth. Popg: Population growth. Aid: Foreign aid. Pub. Ivt: Public Investment.

## Appendix 4: Persistence of the dependent variables

| | Political Governance | | | Economic Governance | | | Institutional Governance | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PS | VA | Polgov | GE | RQ | Ecogov | CC | RL | Instgov | G.gov |
| PS(-1) | 0.961 | | | | | | | | | |
| VA(-1) | | 0.981 | | | | | | | | |
| Polgov(-1) | | | 0.978 | | | | | | | |
| GE(-1) | | | | 0.980 | | | | | | |
| RQ(-1) | | | | | 0.978 | | | | | |
| Ecogov(-1) | | | | | | 0.990 | | | | |
| CC(-1) | | | | | | | 0.967 | | | |
| RL(-1) | | | | | | | | 0.981 | | |
| Instgov(-1) | | | | | | | | | 0.981 | |
| G.gov(-1) | | | | | | | | | | 0.988 |

PS: Political Stability/Non violence. PS(-1): Lagged value of Political Stability/Non Violence. 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.

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