The Comparative African Economics of Governance in Fighting Terrorism

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The Comparative African Economics of Governance in Fighting Terrorism [1]

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The Comparative African Economics of Governance in Fighting Terrorism

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Abstract

This study assesses the comparative economics of governance in fighting terrorism in 53 African countries for period 1996-2012. Four terrorism variables are used, namely: domestic, transnational, unclear and total terrorism dynamics. Nine bundled and unbundled governance variables are employed, notably: political stability/no violence, voice & accountability, political governance, government effectiveness, regulation quality, economic governance, corruption-control, the rule of law and institutional governance. The empirical evidence is based on Fixed Effects regressions. In the analytical procedure, we first bundle governance indicators by means of principal component analysis before engaging the empirical exercise with the full sample. In the final step, specifications are based on a decomposed full sample in order to articulate the fundamental characteristics for comparative purposes. The following broad findings are established. First, good governance is an appealing tool in fighting terrorism. Second, the relevance of the good governance dynamics is as follows in order of increasing relevance: economic governance, institutional governance and political governance. The findings are presented in increasing order of magnitude to emphasise fundamental features in which governance dynamics have the highest effect in mitigating terrorism.

JEL Classification: C52; D74; F42; O38 ; P37

Keywords: Terrorism; Governance; Africa

1. Introduction

The motivation for this inquiry is fourfold: (i) increasing challenges of terrorism to Africa's development; (ii) ongoing debates surrounding the role of governance in mitigating terrorism; (iii) paradigm shifts in the conception and definition of governance and (iv) shortcomings in the literature. The four highlighted points are engaged chronologically.

According to Alfa-Wali *et al.* (2015), trauma from terrorism is increasingly a policy challenge in Africa. According to the authors, while terrorism is not an entirely new phenomenon in Africa, the scale and magnitude with which it has increased over the past years is substantial. The authors are consistent with the position that several factors contribute toward providing an enabling environment for the growth of terrorism on the continent, notably: religious fundamentalism; tribal and ethnic tensions and increasing political instability at regional levels (Fazel, 2013). Clavarino (2014) concurs with this narrative in the perspective that compared to other regions of the world, in spite of Africa currently experiencing surges in waves of radicalisation from Islamic extremism; the continent is not being given the policy attention it deserves because most of the focus has been on the Middle East. Some notable terrorist organisations that are burgeoning across the continent include: al-Shabab in Somalia; Boko Haram in Nigeria and al-Qaeda in the Islamic Maghreb.

The literature on the terrorism-governance nexus is clouded with a lot of controversy (Lee, 2013; Asongu & Nwachukwu, 2017a). The first strand contends that good institutions[2] are not useful in reducing terrorism because the interests of terrorists' organizations may not be represented by democratic government institutions (Gause, 2005). According to the strand, terrorism can be entertained in societies characterized with comparatively good governance standards because of a number of factors that are directly or indirectly linked to grievances and enabling conditions for terrorism activities, namely: civil liberties, freedom and access to media and freedom of speech with which dissatisfaction and disagreement can be expressed (Ross, 1993). The strand of the literature concurs with more contemporary narratives sympathetic to the perspective that exclusive socio-economic development in advanced democracies with good governance motivates terrorism activities (Bass, 2014). A case in point according to Foster (2014) is second-generation Western-educated youths from Europe joining the ranks of the Islamic State of Iraq and Levant (ISIL) because they feel treated like foreigners in their countries. However, a second strand argues that fundamental characteristics

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[2] Throughout the study, this term 'governance' is used interchangeably with 'institutions'. It should be noted that the former concept is distinct from 'institutional governance' which is denoted by the rule of law and corruption-control (see Asongu, 2016a).

of good institutions can mitigate negative sentiments towards the state and therefore, reduce the likelihood of terrorist entities recruiting Islamic fundamentalists (see Windsor, 2003; Li, 2005).

Recent literature on the quality of institutions in Africa has witnessed two major improvements in the conception and measurement of governance. On the conception front, the paradigm shift is motivated by the two principal models of development for Africa in the contemporary era, namely: the Beijing model that prioritises economic governance (or economic rights) versus the Washington consensus that places more emphasis on political governance (or political rights) (Asongu, 2016b; Asongu & Ssozi, 2016). The corresponding literature provides insights into which governance priorities are needed in the short- and long-run to address African development challenges. On the measurement front, it is difficult to measure some of the conceptions of governance underlying the Washington consensus and the Beijing model without an initial bundling of institutions for more representative and/or composite indicators. For example, priorities of the Beijing model and Washington consensus which are respectively economic governance and political governance cannot be measured without bundling some constituent indicators, namely: regulation quality and government effectiveness for economic governance and voice & accountability and political stability for political governance. The above paradigm shifts in the conception and measurement of institutions is motivating a growing stream of literature on the comparative African economics of governance for development outcomes, *inter alia*: (i) most relevant governance mechanisms in stimulating innovation (Oluwatobi *et al*., 2015) and (ii) negative government signals of the Arab Spring (Asongu & Nwachukwu, 2016a).

The literature on relevant instruments by which conflicts could be mitigated and terrorism fought, has proposed a number of interesting channels. On the one hand, more general mechanisms include: press freedom and publicity (Hoffman *et al*., 2013); military tools (Feridun & Shahbaz, 2010); understanding of attitudes towards terrorism (Gardner, 2007); dynamics of transparency (Bell *et al*., 2014) and education/bilingualism (Costa et al., 2008; Brockhoff *et al*., 2015). On the other hand, African-specific studies have been oriented towards exploring and examining: the role of the African Union in the fight against terrorism (Ewi & Aning, 2006); the absence of freedoms and presence of poverty (Barros *et al*., 2008); geopolitical fluctuations (Straus, 2012) and how competition by military companies affect the rate at which conflicts are terminated (Akcinaroglu & Radziszewski, 2013).

With respect to the role of governance in mitigating terrorism, emphasis has either been skewed towards the influence of democratic institutions (Savun & Phillips, 2009; Lee,

2013) or focused on specific institutional dimensions like transparency (Bell *et al.*, 2014) and the rule of law (Choi, 2010).

Noticeably, the engaged literature leaves room for improvement in two key areas, the need for a: comprehensive assessment of the role of governance in fighting terrorism and the comparative emphasis on fundamental characteristics of African development. The former contribution builds on the need to provide a holistic assessment with nine governance indicators while the latter contribution is motivated by the relevance of providing more room for policy implications through the conditioning of findings on specific-fundamentals. The governance variables are: institutional governance (corruption-control and the rule of law); economic governance (government effectiveness and regulation quality); and political governance (political stability/no violence and voice & accountability). The adopted fundamental characteristics are: legal origin (English common law versus vs. French civil law), political stability (conflict-affected vs. politically stable), resource-wealth (resource-rich vs. resource-poor), income levels (low- vs. middle-income), regional proximity (Sub-Saharan Africa (SSA) vs. North Africa), openness to sea (landlocked vs. coastal) and religious domination (Islam vs. Christianity).

The relevance of governance in development outcomes is important for many reasons, namely: amelioration of standards of living through better allocation of resources (Anyanwu & Erhijakpor, 2014; Fosu, 2013), especially for the elderly that are deprived (Fonchingong 2014); understanding governance quality attributes (Efobi, 2015); dynamics of governance by participation (Waheduzzaman & As-Saber, 2015) and good governance for inclusive develoment (Fosu, 2015).

In the light of the above, the research question asked in this study is the following: how does governance affect terrorism in Africa when comparative fundamentals of legal origins, political stability, resource-wealth, income levels, regional proximity, openness to sea and religious domination are taken into account? To answer this question, the study focuses on 53 African countries for the period 1996-2012. Terrorism is understood from four main perspectives, namely, domestic, transnational, unclear and total terrorism dynamics. Nine bundled and unbundled governance variables are employed, notably: political stability/no violence, voice & accountability, political governance, government effectiveness, regulation quality, economic governance, corruption-control, the rule of law and institutional governance. The empirical evidence is based on Fixed Effects regressions. In the analytical procedure, we first bundle governance indicators by means of principal component analysis before engaging the empirical exercise with the full sample. In the final step, specifications

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are based on a decomposed full sample in order to articulate the fundamental characteristics for comparative purposes. The following broad findings are established. First, good governance is an appealing tool in fighting terrorism. Second, the relevance of the good governance dynamics is as follows in order of increasing relevance: economic governance, institutional governance and political governance. The findings are presented in increasing order of magnitude to emphasise fundamental features in which governance dynamics have the highest effect in mitigating terrorism.

The rest of the paper is organized as follows. The theoretical underpinnings are covered in Section 2. Section 3 discusses the data and methodology. The empirical analysis, discussion of results and implications are engaged in Section 4. Section 5 concludes with future research directions.

2. Stylized facts and theoretical underpinnings

2.1 Stylized facts

There are a number of interesting stylized facts linking the nexus between the quality institutions and terrorism on the African continent. Terrorism is defined in this study as the actual and threatened use of force by subnational actors with the purpose of employing intimidation to meet political objectives (Enders & Sandler, 2006). Poor institutions in Africa are substantially contributing to providing a fertile ground for the development of terrorism and extremism on the continent (Clavarino, 2014). Terrorists' organisations in Africa are growing in scale and scope because of a plethora of inherent weakenesses that Islamic fundamentalists (for the most part) can leverage upon, namely: prosperous drug trade from which profits are reinvested in the financing of terrorism; porous borders and undertrained/underequipped armies and vulnerable/corrupt central governments. Clavarino posits that since the collapse of the Muammar Gaddafi's Libyan regime in 2011, Islamic insurgency and militancy have been on a sharply increasing curve in the Sahel region. Moreover, the 2013 French-led intervention in the Western African nation of Mali has contributed to scattering Islamic fondamentalists across the continent. In other parts of Africa, the rise of Islamist militancy is traceable to poor governance for the most part. We put this nexus between poor governance and terrorism into more perspective. The Boko Haram is flurishing in North Eastern Nigeria and neighbouring countries particularly in areas where government presence is weak. For example according to Asongu and Biekpe (2018), the Boko Haram of Nigeria represented the deadliest terrorist organisation in 2014, with about 6,644 deaths, relative to the Islamic State of Iraq and Levant (ISIL) which accounted for about 6,073

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deaths during the same year. The prosperity of Al-Shabaab in East Africa has been traceable to decades of a failed Somali central government. With regard to North Africa, terrorist organisations have grown for the most part in failed states like Libya and areas of weak government influence in other nation states. These include: Ansar Al-Shariya in Tunisia and Ansar Dine, led by a former close Gaddafi ally Iyad Ag Ghaly; Al-Qaeda-linked Mulathameen Brigade led by the Algerian Mokhtar Belmokhtar and Al-Qaeda in the Islamic Maghreb (AQIM).

According to Solomon (2017), over the past five years, approximately 20, 000 people have been killed across Africa by two notable terrorist groups which have accounted for about 71% (91%) of terrorism incidents (fatalities). The author maintains that the number of terrorism-related deaths reached its peak in 2015 when the Boko Haram massacred more than 8,000 people in Niger, Chad, Cameroon and Nigeria. The Boko Haram has inflicted more destruction and death than any other terrorism movement in Africa over the past 20 years, accounting for about one-third of the total deaths. However, in 2015, terrorism-related deaths dropped since that attacks peaked in 2012, not exclusively because of the Boko Haram but also because militant movements from Al-Qaida in the North Africa with allied groups took control of the North of the continent. Terrorism incidence peaked in 2012 because according to the narrative, since 2013, about 17 African countries have not experienced a terrorist attack while 23 have not witnessed terrorism-related deaths. The sample of this research ends in 2012 (partly due to data availability constraints, partly due to the drop in terrorism incidences) and all African countries for which data is available are considered in this research because Solomon (2017) concludes that "*There is not a single country which is unaffected by this, including my own.*"

The relationships between terrorism and governance are provided in the figures below, notably: Figure 1, Figure 2 and Figure 3 respectively depict the connections between governance dynamics and domestic terrorism, transnational terrorism and unclear terrorism. When the figures are observed from vertical and horizontal perspectives, there are consistent negative nexuses between terrorism and governance. Whereas these figures inform the study on the expected sign of the relationships being investigated, the study cannot rely exclusively on the graphs for two main reasons. On the one hand, it is worthwhile to assess whether the established graphical nexuses withstand empirical validity. On the other hand, a comparative empirical analysis with fundamental characteristics is also necessary in order to answer the research question motivating the study.

Figure 1: Domestic terrorism (Domter) and governance
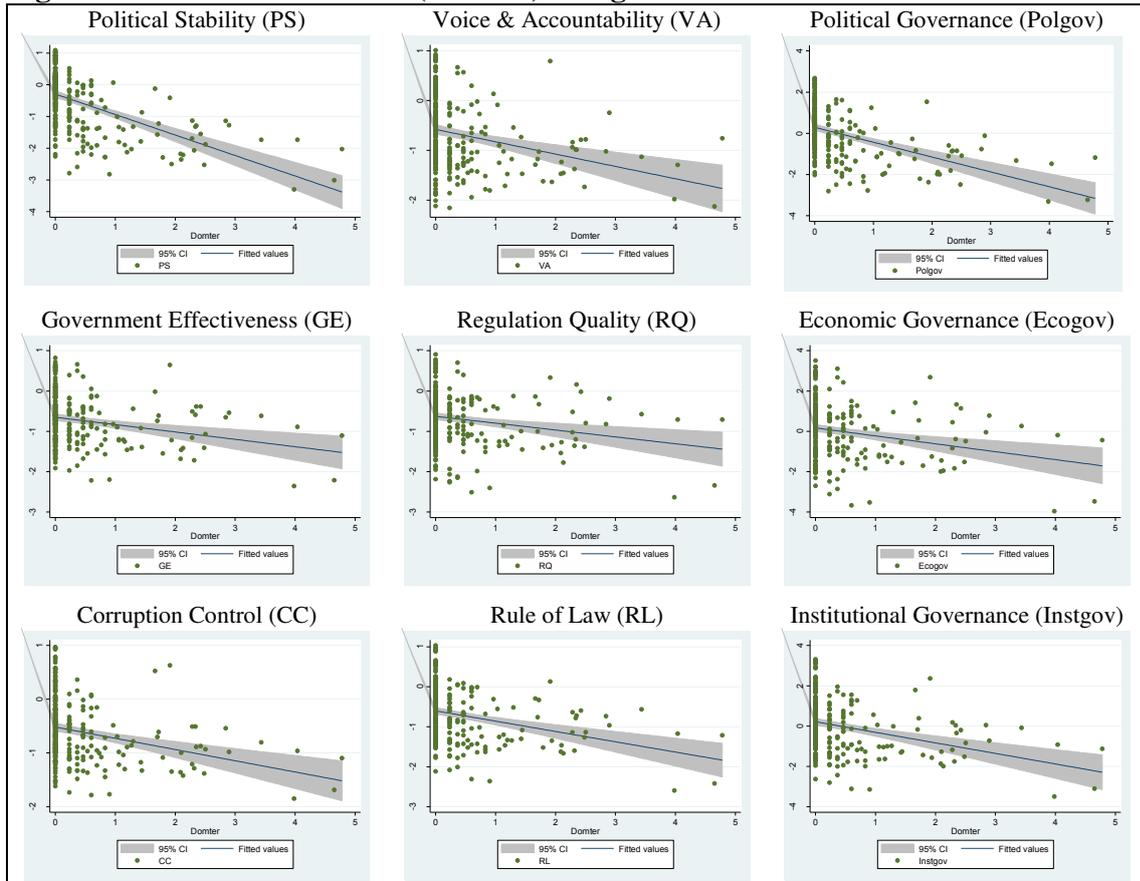
Source: Authors

Figure 2: Transnational terrorism (Transter) and governance
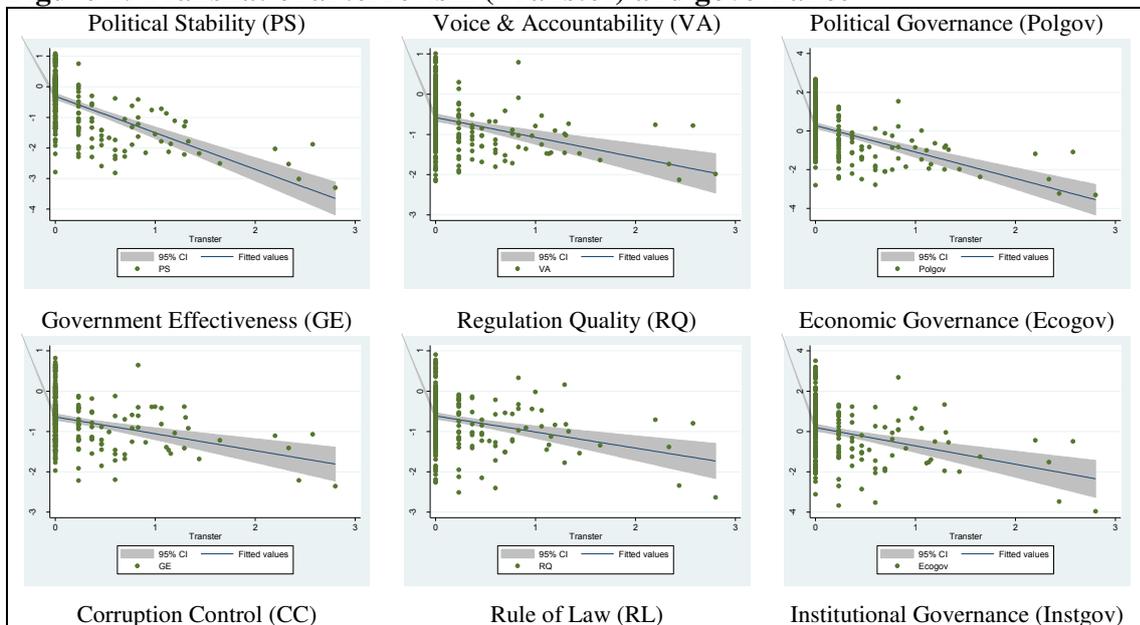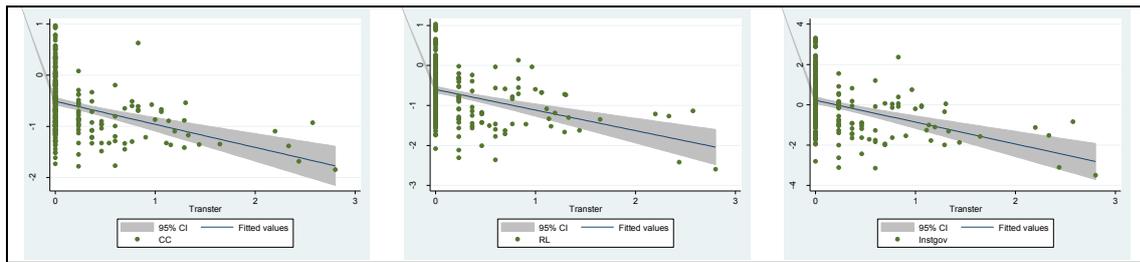
Source: Authors

Figure 3: Unclear terrorism (Unter) and governance
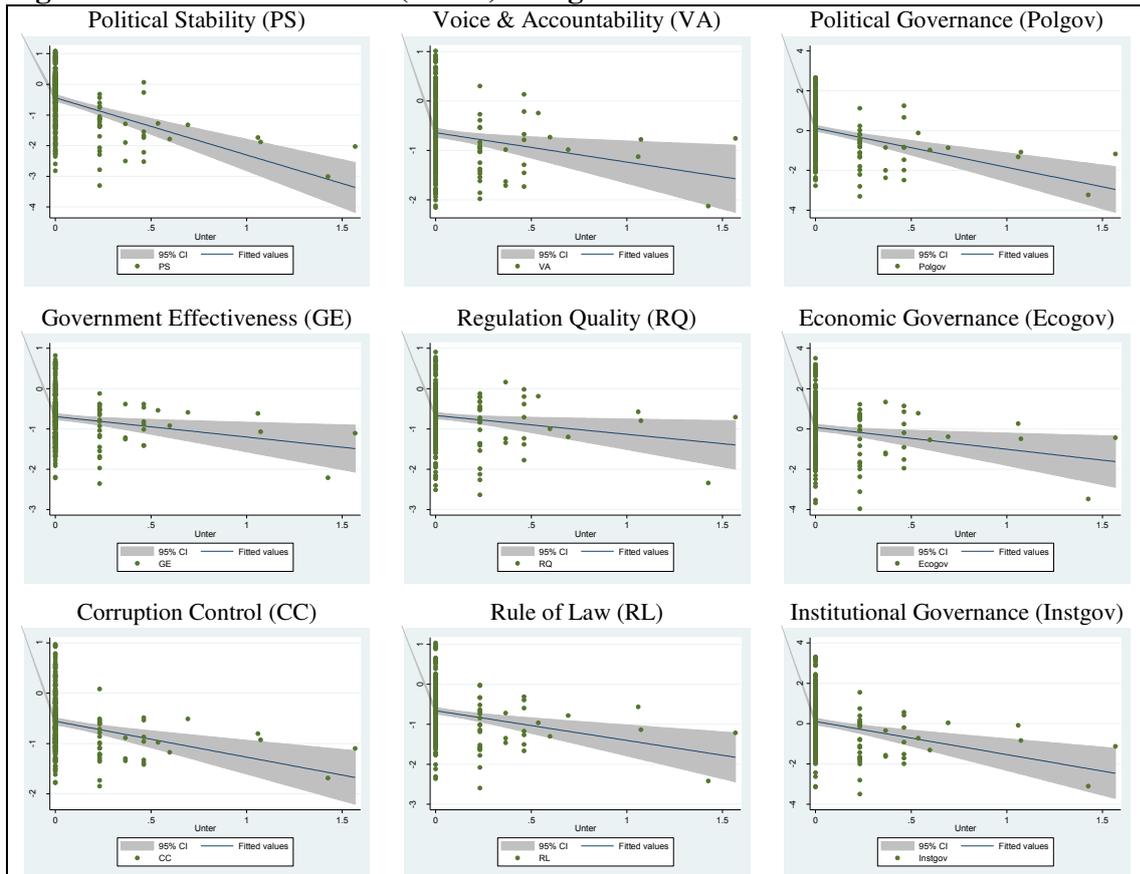
Source: Authors

2.2 Theoretical underpinnings

Theories and intuitions underlying the investigated linkages can be discussed in three principal categories: (i) the nexus between domestic terrorism and governance; (ii) the relationship between transnational terrorism and governance and (iii) debates surrounding the nexus between governance and terrorism. Foundations on the linkage between domestic terrorism and governance are consolidated by the view that citizens in countries have incentives to resort to radical means and political violence against the government (or other institutions), other citizens and political figures (Choi, 2010). Three scenarios under which

they recourse to violence are when: (i) there are grievances on the part of citizens; (ii) there is growing hopelessness and desperation and no peaceful mechanisms by which such grievances can be settled and (iii) citizens think that resorting to terror tactics is legitimate and viable in the communication of their anger and frustration. The logic behind this underpinning is that as long as citizens are endowed with peaceful mechanisms for resolving conflicts, terrorism options may not be practically considered in the resolution of conflicts and settlement of socio-political scores. This narrative is consistent with Taydas *et al.* (2010) who have argued that "*…states characterised with high institutional quality are less likely to experience civil war*" (p. 195). We postulate within this framework that compared to nations with weak governance structures, countries that enjoy comparatively better governance standards are very likely to offer peaceful mechanisms for the settlement of conflicts. This postulation is on the basis that good governance does not offer an appropriate environment for the growth of terror networks because peaceful mechanisms by which to express grievances are available to ordinary citizens.

Transnational terrorism is connected with governance in the perspective that good institutions strengthen the legitimacy of democratic systems in place with shields that protect both citizens and foreigners on the one hand and on the other hand, provide nonviolent channels by which disputes can be resolved (Choi, 2010). Hence, it is very likely that transnational terrorism is curbed by the following good governance dynamics: (i) political governance, which offers fair and free domestic means for the replacement and election of political leaders; (ii) economic governance, which enables the formulation and implementation of good measures that provide the citizens with public goods and services and (iii) institutional governance, that oversees the respect by the State and citizens of institutions that governance interactions between them. The definitions of governance are consistent with Asongu and Nwachukwu (2016a).

The theoretical literature has conflicting positions on the nexus between terrorism and governance. Studies focusing on the relationship predominantly build on the scholarship that emphasizes opportunities of violence that are exploited from regime-based differences (democracy versus autocratic) (Hoffman *et al.*, 2013). While autocracies are characterized with bad governance, democracies endow citizens with liberties to engage economically and politically without substantial interferences from governments. Externalities from good governance are not exclusively positive because some downsides like avenues of mischief may move hand-in-glove with democratic processes. In substance, contrary to stable autocracies, countries that are characterized with strong democracies could very easily be the

focus of and target by terrorists entities because violence is curtailed ex-ante and not ex-post by good governance. The articulation on stable democracies is motivated by the perspective that failed or failing states cannot easily control terrorism. More insights into this position is available in Lai (2007) and Piazza (2008a). The stance has also been confirmed in a broad stream of terrorism literature (Schmid, 1992; Eubank & Weinberg, 1994; Drakos & Gofas, 2006; Piazza, 2007; Asongu & Amankwah-Amoah, 2018).

Conversely, a strand of the theoretical literature is more optimistic on the relationship between good governance and terrorism. For instance, the political access theory (Eyerman, 1998) postulates that countries enjoying strong democracies and comparatively good governance standards are more likely to be immune from terrorism compared to their counterparts with poor democracies and governance. Some of the documented government institutions' facilities that contribute toward this advantage in the negative governance-terrorism nexus include: respect of the rule of law (Choi, 2010); independence of judiciaries (Findley & Young, 2011) and the six governance dynamics from Kaufmann et al. (2010). In the light of the above, it is reasonable to infer that good governance provides citizens with avenues of and channels by which grievances from citizens can be settled pacifically without resorting to violence and terrorism (Li, 2005).

On the empirical front, there is a wealth of literature documenting the positive relationship between democracy and terrorism (see Lee, 2013). More specific literature on the nexus between transnational terrorism and democracy include: Eubank and Weinberg (1994, 2001); Weinberg and Eubank (1998) and Piazza (2007, 2008b). Terrorism can be stimulated by domestic competition in environments of good governance (Chenoweth, 2010). There are two main competing impacts from democratic institutions on terrorism (Li, 2005). On the one hand, democracy by participation reduces the likelihood for transnational terrorism. On the other hand, due to political deadlock in checks and balances, constraints in government structures and procedures can grease transnational terrorism.

According to Savun and Phillips (2009), the responsiveness of terrorism to foreign policy is higher than its responsiveness to democratic institutions. In essence, the foreign policy alignment of a country can significantly determine if the country is victim of transnational terrorism organisations, irrespective of prevailing democratic institutions in the country. According to the authors, nations that shy away from international policies are less likely to be targeted by transnational terrorism. This is not the case of countries that are actively engaged in international politics because the foreign policy position adopted by a country can fuel resentment abroad. In summary, irrespective of regime types *per se*,

countries with mature democratic and governance institutions can still be the object of attacks by terrorists' networks if their foreign policy towards countries hosting corresponding terrorist organisations fuels resentment.

3. Data and Methodology

3.1 Data and fundamental characteristics

3.1.1 Data

The study assesses a panel of 53 African countries with data for the period 1996-2012. The data is from three principal sources, namely: (i) African Development Indicators (ADI) and World Governance Indicators from the World Bank; (ii) the Global Terrorism Database and (iii) an improved computation of terrorism incidents from Enders et al. (2011) and Gailbulloev *et al.* (2012). The adopted periodicity is because of data availability constraints. Three points elicit these constraints. The computed terrorism incidents from Enders et al. (2011) and Gailbulloev *et al.* (2012) are only available up to the year 2012. Macroeconomic indicators from the ADI of the World Bank are also only available until 2012. The periodicity starts from 1996 because good governance indicators from the World Bank are not available before 1996.

Accordingly, whereas the full periodicity is 1996-2012, two distinctive features are apparent: (i) annual periodicity instead of data averages (or non-overlapping intervals) is employed because the empirical strategy is based on Fixed Effects (FE) estimators which require that the time series properties (T) are large and (ii) the comparative emphasis on governance is based on fundamental characteristics. The resulting T=17 (1996-2012) is therefore based on data availability constraints at the time of the study. This departs from Asongu et al. (2018a) who have used the Generalised Method of Moments and five three-year non-overlapping intervals (1998-2000; 2001-2003; 2004-2006; 2007-2009 and 2010-2012) in order to avoid misspecification owing to instrument proliferation.

The study uses four different but related terrorism dependent indicators, namely: domestic, transnational, unclear and total terrorism dynamics. The dependent indicator is a record of yearly terrorism incidents experienced by a country. In order to correct for the positive skew in the data and avoid mathematical concerns about log-transforming zeros, the study is in accordance with the literature (Choi & Salehyan, 2013; Bandyopadhyay *et al.*, 2014; Efobi & Asongu, 2016; Asongu *et al.*, 2017; Asongu & Biekpe, 2018) in adding one to the base and taking the natural logarithm of terrorism incidents.

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Terrorism is defined in this study as the actual and threatened use of force by subnational actors with the purpose of employing intimidation to meet political objectives (Enders & Sandler, 2006; Asongu & Nwachukwu, 2016b). Terrorism-specific definitions are from Efobi *et al.* (2015, p. 6). Domestic terrorism "*includes all incidences of terrorist activities that involves the nationals of the venue country: implying that the perpetrators, the victims, the targets and supporters are all from the venue country*" (p.6). Transnational terrorism is "*terrorism including those acts of terrorism that concerns at least two countries. This implies that the perpetrator, supporters and incidence may be from/in one country, but the victim and target is from another*". Unclear terrorism is that, "*which constitutes incidences of terrorism that can neither be defined as domestic nor transnational terrorism*" (p.6). Total terrorism is the sum of domestic, transnational and unclear terrorisms.

The explaining indicators are nine bundled and unbundled governance variables: corruption-control, the rule of law, government effectiveness, regulation quality, political stability, voice and accountability, institutional governance, economic govenance and political governance. While the first-six unbundled governance variables are from Kaufmann *et al.* (2010), the last-three bundled indicators are derived from a statistical technique or Principal Component Analysis (PCA) which is engaged in Section 3.2.1. As observed in the previous sections, these governance variables are consistently being used in an evolving stream of good governance literature (Gani, 2011; Yerrabit & Hawkes, 2015).

To ascertain that results are not biased by concerns about omitted variables, the study uses five control variables, namely: inclusive development, internet penetration, inflation, economic growth (GDP growth) and military expenditure. First, exclusive development has been established to be positively associated with adherence to and sympathy for terrorists' organisations (see Bass, 2014). An eloquent example is the case of Western-born and -educated youth joining ISIL (Foster, 2014). Furthermore, Tonwe and Eke (2013) maintain that the fundamental cause of Nigeria's Boko Haram is traceable to the fact that the Northern region of the country is less developed compared to the Southern region. We employ the inequality adjusted human development index (IHDI) as a proxy for inclusive development because of constraints in data availability (e.g. the Gini index for inequality). This narrative is consistent with the position that economic hardship on the poor increases their level of grievance and makes them more likely to be sympathetic to or engage in international terrorism (Choi & Luo, 2013). Second, Argomaniz (2015) and Holbrook (2015) have established that the internet is increasingly being used by terrorists' organisations like ISIL for recruitment, propaganda and coordination of terrorists' attacks.

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Third, we expect very high inflation to be associated with violence and political strife because of *inter alia*: decreasing purchasing power and diminishing domestic investment due to a negative economic outlook (Asongu & Nwachukwu, 2016a). Fourth, economic prosperity is anticipated to reduce the likelihood for terrorists' activities because it is associated with an improvement in the much needed financial resources for fighting the scourge. The intuition for this expectation aligns with Gaibulloev and Sandler (2009) who have maintained that compared with low-income countries, nations with high-income can better absorb the effects of terrorism without significant negative economic externalities. It also important to balance this narrative with recent evidence that: "*economic growth is not a cure-all solution for terrorism because it may be associated in some instances with more terrorist incidents*" (Choi, 2015, p. 157). Fifth, as documented by Feridum and Shahbaz (2010), military expenditure is expected to be negatively linked to terrorism.

The definitions of variable are provided in Appendix 1, whereas the summary statistics and correlation matrix are disclosed in Appendix 2 and Appendix 3 respectively. It can be observed from the summary statistics that the means of variables are comparable. Corresponding variations from the standard deviations is an indication that we can be confident that reasonable estimated linkages would emerge. The objective of the correlation matrix is to control for issues in multicollinearity. An initial assessment shows that concerns about high degrees of substitution are exclusively apparent among governance indicators on the one hand and terrorism variables on the other hand. While the study addresses the concern about multicollinearity in governance indicators by using them in different specifications, the issues in terrorism indicators is not relevant because these are exclusively employed as dependent variables.

3.1.2 Determination of fundamental characteristics

The choice of the fundamental characteristics which have been empirically and theoretically justified in extant comparative African development literature (Asongu & Nwachukwu, 2017b)[3] are also consistent with recent literature on fighting terrorism in Africa (Asongu *et al.*, 2018b). They include: legal origins (French civil law vs. English common law), political stability (politically-stable vs. conflict-affected), resource-wealth (resource-poor vs. resource-

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[3] These fundamental features are consistent with a strand of comparative African development literature Asongu (2013, 2014a,b, 2017a,b).

rich), income levels (middle-income vs. low-income), regional proximity (North Africa vs. SSA), openness to sea (coastal vs. landlocked) and religious domination (Christianity vs. Islam).

First, the foundations of legal origin as a distinguishing characteristic in African countries has considerably been documented in the literature over the past decades, notably with respect to comparative advantages in: (i) education, economic growth and openness (Agbor, 2015); (ii) adaptation to changing and growing economic conditions (Beck *et al.*, 2003) and (iii) quality of institutions (La Porta *et al.*, 1998, 1999). The institutional edge enjoyed by English common law countries over French civil law nations which has been theorized by La Porta *et al.* (1998, 1999) and Beck *et al.* (2003), has been confirmed to withstand empirical scrutiny in recent African development literature (Asongu, 2012a,b; Agbor, 2015). In a nutshell, the intuition motivating the classification is that the institutional web of formal norms, informal rules and enforcement features within a legal system has some bearing on how terrorism is fought by means of government quality and institutional regimes (Li, 2005; Choi, 2010; Lee, 2013). Classification of countries in terms of legal origins builds on information from La Porta *et al.* (2008, p. 289).

Second, in the categorization of countries in relation to conflicts and political strife, there are obviously practical issues with regard to assigning a country to this category in an exclusive and non-arbitrary manner. Accordingly, it is important to distinguish the countries by articulating the periodicity and significance of political strife and instability because it is not obvious for a country to be completely conflict-free. With these insights, two groups can be substantiated in terms "civil war" and "political strife". (i) The group on civil war entails: Somalia; Sudan; Sierra Leone; Liberia; Côte d'Ivoire (1999 coup d'état, 2002-2007 civil war, rekindled in 2011); the Democratic Republic of Congo; the Central African Republic (with the 2004-2007 Bush War and waves of aborted coup d'états between 1996-2003); Chad (2005-2010); Burundi and Angola. (ii) Concerning the second group on political strife, in spite of the fact that formal characteristics of war are not apparent, Zimbabwe and Nigeria are also included in the light of the magnitude of their internal strife. The two groups are related to terrorism in the perspective that political strife and civil conflicts harbor breeding grounds for the proliferation of terrorism.

Third, in the categorization of resource-wealthy countries, there are two main issues in the clustering of petroleum-exporting countries. (i) There are some countries which can qualify as wealthy in resources for only a small fraction of the sampled periodicity. This may be either due a decline in the production of resources or the recent discovery of reserves in oil.

(ii) Some countries which are not wealthy in the export of petroleum also reflect macroeconomic features that are similar to those of petroleum-exporting countries. A good example is Botswana which considerably depends on a mineral-intensive industry. We address this issue by exclusively selecting countries for which exports have been petroleum-dominated for at least a decade of the sampled periodicity. A minimalist approach is adopted in this study in the perspective that we exclusively select petroleum-exporting nations that meet the underlying criterion, namely: Angola, Algeria, Chad, Cameroon, Congo Republic, Gabon, Equatorial Guinea, Nigeria, Libya and Sudan.

Fourth, there are two motivations for the categorization of nations in terms wealth. (i) Wealthy or high income nations have been established to be associated with more resources needed to mitigate the negative externalities of terrorism (Gaibulloev & Sandler, 2009). This is also consistent with a recent stream of literature on the use of foreign aid to mitigate the negative effects associated with terrorism (Asongu & Kodila-Tedika, 2017; Asongu & Nwachukwu, 2017c). The two narratives are connected in the perspective that foreign aid is disbursed by high-income countries to their low-income counterparts. (ii) In Africa, income levels have been established to be exogenous to good governance (Asongu, 2012c), which is essential in the fight against terrorism. The classification of income-levels is consistent with the Financial Development and Structure Database of the World Bank. These include: low-, middle-, 'lower middle'- and 'upper middle'-income countries.

Fifth, regional classification is in terms of SSA and North Africa for a twofold reason. (i) For the most part, North African countries exclusively reflect Islam-dominated countries from which a significant cause of terrorism such as Islamic fundamentalism may be apparent. (ii) In accordance with Boyce and Ndikumana (2008), this distinction (which is consistent with the World Bank's regional classification) provides room for more policy implications.

Sixth, contrary to landlocked nations, coastal countries may provide more avenues for terrorism by means of more networking and movement opportunities. Furthermore, countries that are closed from the sea have been documented to be associated with lower governance quality levels (Arvis *et al*., 2007) and by extension; political stability/non-violence (which is an aspect of political governance) could provide opportunities for political strife and civil wars that eventually provide a fertile ground for terrorism. Seventh, the classification of religious dominations is based on the Central Intelligence Agency (CIA) World Fact book (CIA, 2011).

The definitions of fundamental features are disclosed in Appendix 4. Moreover, the statistical validity for the choice of fundamental characteristics on the one hand and

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differences in terrorism dynamics within fundamental characteristics on the other hand, are provided in Appendix 5 and Appendix 6 respectively. In essence, the 'difference in means' tests which are overwhelmingly significant confirm the statistical validity of the choice of fundamental characteristics and distinction of terrorism dynamics within fundamental characteristics.

It is worthwhile to articulate that some indicators of governance have figures that are above the standard range of between -2.5 to +2.5, namely: non principal component (PC)-augmented variables and PC-augmented variables. Concerning the PC-augmented variables, depending on eigenvalues and proportion of variation pertaining to the derived PC, the corresponding PC composite indicators can display ranges that are higher than those reflected by their constituent elements. For instance, the -4.102 corresponding to economic governance is not an issue. Some non PC-augmented variables such as political stability in Sudan also have lower limits that are below -2.5. The few exceptions are close to the lower limit and limited to only three years of the sampled 17 years and do not significantly affect the findings. This justification for the scale of governance variables has been used in contemporary African governance literature (Asongu *et al*., 2019).

3.2 Methodology

3.2.1 Principal Component Analysis

The principal component analysis (PCA) technique is adopted to bundle variables for the conceptual relevance of some governance indicators. It is a statistical approach that is employed to reduce the dimensions of a set of highly correlated variables into smaller sets of indicators that are composite and uncorrelated (Tchamyou, 2017, 2018; Asongu & Tchamyou, 2016; Mina, 2017). High degrees of substitution among governance variables that justify the approach are provided in Appendix 3. The criteria employed to retain common factors or principal components (PCs) are from Kaiser (1974) and Jolliffe (2002) who have recommended the selection of PCs with an eigenvalue greater than the mean or one.

As apparent in Table 1, the first PC denoting the composite indicator for political governance (*Polgov*) has an eigenvalue of 1.647 and a total variation of 82.3%. In the same vein: (i) economic governance (*Ecogov*) has an eigenvalue 1.863 and a total variation of 93.1% while (ii) institutional governance (*Instgov*) has an eigenvalue of 1.867 with a total variation of 93.3%. Political governance which is the election and replacement of political leaders consists of voice & accountability and political stability/no violence. Economic governance is the formulation and implementation of policies that deliver public goods and is

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composed of government effectiveness and regulation quality. Institutional governance which is represented by corruption-control and the rule of law, is the respect by citizens and the state of institutions that governance interactions between them. While the definitions are drawn from Kaufmann (2010), the bundling exercise that is needed to match the definitions with statistical validity is consistent with Asongu and Nwachukwu (2016a).

Table 1: Principal Component Analysis (PCA) for Governance

Principal Components	Component Matrix(Loadings)						Proportion	Cumulative Proportion	Eigen Value
	VA	PS	RQ	GE	RL	CC			
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. Polgov (Political Governance): First PC of VA & PS. Ecogov (Economic Governance): First PC of RQ & GE. Instgov (Institutional Governance): First PC of RL & CC.

3.2.2 Methodology

Given that T>N in most sub-samples, the Fixed Effects (FE) estimator has better 'goodness of fit' properties compared to dynamic estimation techniques such as the Generalised Method of Moments. The FE model is adopted in order to control for characteristics that are consistent with the research question being investigated, notably: country-specific features or the unobserved heterogeneity. Furthermore, it is relevant to note that, when a panel consists of observations on fixed and comparatively small sets of countries or cross section units (e.g. specific fundamental characteristics or member states of a given region), there is a presumption in favour of FE (Asongu & Nwachukwu, 2018).

Eq. (1) below corresponds to the adopted FE process[4].

$$T_{i,t} = \alpha_0 + \sigma_1 G_{i,t} + \sum_{h=1}^{5} \delta_h W_{h,i,t} + \eta_i + \xi_t + \varepsilon_{i,t} \qquad (1)$$

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[4] The inclusion of a lagged term for terrorism will make the modeling dynamic and the Fixed Effects method will be inappropriate for its estimation because of a potential correlation between the lagged terrorism indicator and the error term. Unfortunately, using a dynamic model like the Generalized Method of Moments would result in instrument proliferation because some fundamental characteristics have countries (N) that are smaller than the number of periods in the study (T). There are various causes of endogeneity. Some are the unobserved heterogeneity and simultaneity. The adopted Fixed Effects regressions control for the unobserved heterogeneteity which is not accounted for by dynamic regressions such as Generalized Method of Moments.

where, $T_{i,t}$, is a terrorism variable (domestic, transnational, unclear and total) of country i at period t; $G_{i,t}$ is a governance indicator (political, economic or institutional governance); α_0 is a constant; W is the vector of control variables (*Internet, inclusive development, economic growth, inflation,* and *military expenditure*), η_i is the country-specific effect, ξ_t is the time-specific constant and $\varepsilon_{i,t}$ the error term. The specifications are Heteroscedasticity and Autocorrelation Consistent (HAC) in standard errors. They are also carefully tailored to avoid potential issues of multicollinearity associated with governance indicators. In the presence of very high collinearity (as it is the case with the governance indicators), the variables with the high degree of substitution enter into conflict and only a few emerge from the regression output with the expected signs (Beck *et al.*, 2003). Unexpected signs in the variables of interest obviously lead to misguided policy implications. Hence, the governance variables are employed in distinct specifications. Moreover, the governance variables are comparable because they are employed in different specifications with the same control variables (Andrés & Asongu, 2013; Asongu & Kodila-Tedika, 2016; Tchamyou *et al.*, 2018).

4. Empirical results

Tables 2, 3 and 4 respectively present findings corresponding to the relationships between terrorism dynamics and political governance, economic governance and institutional governance. Each table consists of three-sets of four specifications. Each of the four specifications uniquely corresponds to one terrorism variable. The first-two sets of specifications are related to the constituents of the composite indicator in the third-set.

In Table 5, the specifications are based on a decomposed full sample in order to articulate the fundamental characteristics for comparative purposes. Panel A, B, C and D respectively show results corresponding to domestic terrorism, transnational terrorism, unclear terrorism and total terrorism.

4.1 Governance and terrorism

Regressions from the full sample provide baseline results which are informative and expositional for the comparative analysis. The following baseline findings can be established on the relationship between governance and terrorism in Tables 2-4. First, from the baseline results on political governance, the following are apparent. (i) Only voice and accountability significantly reduces unclear terrorism. (ii) Political stability consistently decreases the dynamics of terrorism with the following order of increasing negative magnitude: unclear

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terrorism, transnational terrorism, domestic terrorism and total terrorism. (iii) Political governance also consistently decreases terrorism variables with the same order of increasing negative magnitude: unclear terrorism, transnational terrorism, domestic terrorism and total terrorism.

Second, from the perspective of economic governance, the following are established: (i) regulation quality has significant positive effects on domestic terrorism and total terrorism; (ii) government effectiveness has a significant negative effect on domestic terrorism whereas (iii) there is no significant effect from economic governance on any terrorism variable.

Third, concerning the relationship with institutional governance, the rule of law negatively affects unclear and total terrorisms whereas no significant effects are apparent from corruption-control and institutional governance.

The signs of two control variables are worth discussing. While the sign of internet penetration is consistent with our expectations, that of inclusive human development is unexpectedly positive. The positive effect of inclusive human development may be traceable to the narratives in the literature maintaining that the African elite and middle class are unsympathetic to policies of inclusive development because such policies reduce their vested gains (Poulton, 2014). Hence, because these elite depend on state resources and have preferences for specific markets, they are very likely to skillfully hamper socio-economic transformations by employing internal (e.g. civil unrest/war) and external (e.g. terrorism) tactics of violence in order to retain a tight grip on governing institutions (see Poulton, 2014; Resnick, 2015). This clarification is consistent with Rodrik's (2015) skepticism of the role of the elite and middle class on governance transformations in the continent.

Table 2: Political Governance and terrorism

	Voice and Accountability				Political Stability				Political Governance			
Dependent Variables: Terrorism Dynamics	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror
Constant	**0.366****	0.107	-0.013	**0.396****	**0.215***	0.059	0.025	**0.284****	**0.435*****	**0.247*****	0.091	**0.564*****
	(0.016)	(0.255)	(0.869)	**(0.012)**	**(0.077)**	(0.434)	(0.702)	**(0.025)**	**(0.001)**	**(0.001)**	(0.156)	**(0.000)**
Voice & Accountability	-0.037	-0.142	**-0.132***	-0.151	---	---	---	---	---	---	---	---
	(0.821)	(0.122)	**(0.091)**	(0.324)								
Political Stability	---	---	---	---	**-0.446*****	**-0.365*****	**-0.116****	**-0.549*****	---	---	---	---
					(0.000)	**(0.000)**	**(0.025)**	**(0.000)**				
Political governance	---	---	---	---	---	---	---	---	**-0.287*****	**-0.276*****	**-0.119****	**-0.393*****
									(0.001)	**(0.000)**	**(0.012)**	**(0.000)**
Internet	**0.018*****	0.004	0.002	**0.016*****	**0.016*****	0.002	0.001	**0.014*****	**0.017*****	0.003	0.002	**0.015*****
	(0.000)	(0.175)	(0.352)	**(0.001)**	**(0.001)**	(0.423)	(0.480)	**(0.006)**	**(0.000)**	(0.288)	(0.443)	**(0.003)**
Inclusive development	**0.045*****	**0.012***	**0.021*****	**0.053*****	**0.041*****	0.008	**0.019*****	**0.047*****	**0.044*****	**0.011***	**0.020*****	**0.051*****
	(0.000)	**(0.056)**	**(0.000)**	**(0.000)**	**(0.000)**	(0.190)	**(0.001)**	**(0.000)**	**(0.000)**	**(0.083)**	**(0.000)**	**(0.000)**
GDP growth	-0.006	-0.006	-0.006	-0.009	-0.004	-0.006	-0.007	-0.008	-0.003	-0.004	-0.006	-0.006
	(0.489)	(0.260)	(0.169)	(0.339)	(0.590)	(0.265)	(0.133)	(0.377)	(0.696)	(0.403)	(0.181)	(0.508)
Inflation	**-0.002****	0.0008	0.0007	-0.0008	**-0.002*****	0.0004	0.0006	-0.001	**-0.002*****	0.0005	0.0006	-0.001
	(0.027)	(0.192)	(0.178)	(0.459)	**(0.005)**	(0.464)	(0.227)	(0.176)	**(0.009)**	(0.416)	(0.246)	(0.223)
Military Expenditure	0.009	0.014	0.018	0.023	-0.020	-0.009	0.011	-0.012	-0.006	-0.0006	0.012	0.002
	(0.836)	(0.628)	(0.453)	(0.620)	(0.649)	(0.726)	(0.645)	(0.795)	(0.887)	(0.983)	(0.609)	(0.953)
R²(Within)	0.076	0.028	0.053	0.071	0.123	0.106	0.058	0.134	0.099	0.080	0.061	0.109
Fisher	**5.72*****	**2.03***	**3.95*****	**5.34*****	**9.78*****	**8.30*****	**4.33*****	**10.76*****	**7.69*****	**6.09*****	**4.56*****	**8.52*****
Countries	49	49	49	49	49	49	49	49	49	49	49	49
Observations	471	471	471	471	471	471	471	471	471	471	471	471

*,**,***: significance levels of 10%, 5% and 1% respectively. Significant values are highlighted in bold. Trans: Transnational terror. GDP: Gross Domestic Product. FE: Fixed Effects. The difference between the total number of observations from the regression output and the total number of observations based a uniform sample size is due to issues of missing observations.

Table 3: Economic Governance and terrorism

	Regulation Quality				Government Effectiveness				Economic Governance			
Dependent Variables: Terrorism Dynamics												
	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror
Constant	**0.547*****	**0.277*****	0.071	**0.659*****	0.210	0.150	0.021	**0.350****	**0.378*****	**0.180****	0.086	**0.474*****
	(0.000)	**(0.003)**	(0.359)	**(0.000)**	(0.162)	(0.116)	(0.974)	**(0.028)**	**(0.004)**	**(0.032)**	(0.229)	**(0.001)**
Regulation Quality	**0.374****	0.185	0.005	**0.385***	---	---	---	---	---	---	---	---
	(0.045)	(0.123)	(0.957)	**(0.054)**	---	---	---	---	---	---	---	---
Government Effectiveness	---	---	---	---	**-0.359***	-0.095	-0.100	-0.294	---	---	---	---
	---	---	---	---	**(0.062)**	(0.434)	(0.337)	(0.150)				
Economic Governance	---	---	---	---	---	---	---	---	0.007	0.028	-0.029	0.030
									(0.939)	(0.655)	(0.592)	(0.777)
Internet	**0.017*****	0.003	0.002	**0.015*****	**0.018*****	0.004	0.002	**0.016*****	**0.018*****	0.004	0.002	**0.016*****
	(0.000)	(0.234)	(0.362)	**(0.003)**	**(0.000)**	(0.206)	(0.411)	**(0.002)**	**(0.000)**	(0.178)	(0.356)	**(0.001)**
Inclusive development	**0.045*****	**0.011***	**0.020*****	**0.052*****	**0.047*****	**0.012***	**0.020*****	**0.054*****	**0.045*****	**0.011***	**0.020*****	**0.052*****
	(0.000)	**(0.071)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.061)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.076)**	**(0.000)**	**(0.000)**
GDPg growth	-0.007	-0.008	-0.008	-0.011	-0.005	-0.007	-0.007	-0.009	-0.006	-0.008	-0.007	-0.010
	(0.434)	(0.171)	(0.111)	(0.253)	(0.580)	(0.212)	(0.134)	(0.341)	(0.466)	(0.176)	(0.121)	(0.270)
Inflation	**-0.001***	**0.001***	0.0008	-0.0003	**-0.002****	0.0009	0.0008	-0.0007	**-0.002****	0.0009	0.0007	-0.0006
	(0.063)	**(0.097)**	(0.143)	(0.732)	**(0.022)**	(0.164)	(0.150)	(0.468)	**(0.029)**	(0.142)	(0.161)	(0.532)
Military Expenditure	0.031	0.025	0.019	0.047	-0.015	0.008	0.012	0.004	0.010	0.018	0.015	0.029
	(0.496)	(0.387)	(0.441)	(0.338)	(0.745)	(0.787)	(0.634)	(0.933)	(0.822)	(0.532)	(0.561)	(0.565)
R^2(Within)	0.084	0.028	0.047	0.077	0.083	0.024	0.049	0.073	0.076	0.023	0.048	0.069
Fisher	**6.43*****	**2.03***	**3.45*****	**5.83*****	**6.34*****	1.73	**3.61*****	**5.53*****	**5.71*****	1.65	**3.5*****	**5.18*****
Countries	49	49	49	49	49	49	49	49	49	49	49	49
Observations	471	471	471	471	471	471	471	471	471	471	471	471

*,**,***: significance levels of 10%, 5% and 1% respectively. Significant values are highlighted in bold. Trans: Transnational terror. GDP: Gross Domestic Product. FE: Fixed Effects. The difference between the total number of observations from the regression output and the total number of observations based a uniform sample size is due to issues of missing observations.

Table 4: Institutional Governance and terrorism

	Rule of Law				Corruption-Control				Institutional Governance			
	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror	Domestic Terror	Trans. Terror	Unclear Terror	Total Terror
Constant	0.234 (0.125)	0.101 (0.295)	-0.047 (0.563)	**0.312*** **(0.053)**	**0.470*** **(0.001)**	**0.220** **(0.012)**	0.090 (0.223)	**0.575*** **(0..000)**	**0.379*** **(0.003)**	**0.206** **(0.010)**	0.084 (0.213)	**0.494*** **(0.000)**
Rule of Law	-0.299 (0.121)	-0.191 (0.117)	**-0.236** **(0.024)**	**-0.359*** **(0.078)**	---	---	---	---	---	---	---	---
Corruption-Control	---	---	---	---	0.201 (0.203)	0.055 (0.583)	0.048 (0.596)	0.193 (0.249)	---	---	---	---
Institutional Governance	---	---	---	---	---	---	---	---	0.008 (0.923)	-0.022 (0.693)	-0.034 (0.473)	-0.008 (0.931)
Internet	**0.018*** **(0.000)**	0.004 (0.180)	0.002 (0.362)	**0.016*** **(0.001)**	**0.019*** **(0.000)**	0.004 (0.161)	0.002 (0.327)	**0.017*** **(0.001)**	**0.018*** **(0.000)**	0.004 (0.189)	0.002 (0.388)	**0.016*** **(0.002)**
Inclusive development	**0.045*** **(0.000)**	**0.011*** **(0.068)**	**0.020*** **(0.000)**	**0.052*** **(0.000)**	**0.043*** **(0.000)**	**0.011*** **(0.087)**	**0.019*** **(0.000)**	**0.050*** **(0.000)**	**0.045*** **(0.000)**	**0.012*** **(0.066)**	**0.020*** **(0.000)**	**-0.052**** **(0.000)**
GDPg growth	-0.005 (0.532)	-0.007 (0.221)	-0.007 (0.147)	-0.009 (0.331)	-0.007 (0.440)	-0.007 (0.179)	-0.008 (0.107)	-0.010 (0.259)	-0.006 (0.465)	-0.007 (0.193)	-0.007 (0.121)	-0.010 (0.280)
Inflation	**-0.002** **(0.018)**	0.0008 (0.213)	0.0006 (0.221)	-0.0009 (0.390)	**-0.002** **(0.043)**	0.0009 (0.138)	0.0008 (0.124)	-0.0005 (0.607)	**-0.002** **(0.030)**	0.0008 (0.175)	0.0007 (0.172)	-0.0007 (0.503)
Military Expenditure	-0.007 (0.686)	0.003 (0.902)	0.005 (0.827)	0.003 (0.939)	0.018 (0.692)	0.017 (0.557)	0.021 (0.392)	0.033 (0.498)	0.010 (0.820)	0.012 (0.677)	0.015 (0.543)	0.023 (0.629)
R^2(Within)	0.081	0.028	0.059	0.076	0.079	0.023	0.048	0.072	0.076	0.023	0.048	0.069
Fisher	**6.14***	**2.04***	**4.35***	**5.72***	**6.00***	1.67	**3.50***	**5.40***	**5.71***	1.65	**3.54***	**5.16***
Countries	49	49	49	49	49	49	49	49	49	49	49	49
Observations	471	471	471	471	471	471	471	471	471	471	471	471

Dependent Variables: Terrorism Dynamics

*,**,***: significance levels of 10%, 5% and 1% respectively. Significant values are highlighted in bold. Trans: Transnational terror. GDP: Gross Domestic Product. FE: Fixed Effects. The difference between the total number of observations from the regression output and the total number of observations based a uniform sample size is due to issues of missing observations.

Table 5: Summary of results

Panel A: Domestic Terrorism

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		Africa
	Low	Mid	LMid	UMid	English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
VA	-0.266	**0.498***	**0.989***	**-0.187***	-0.389	0.007	-0.838	0.010	**-0.585***	**0.392***	-0.240	-0.089	-0.160	0.057	-0.147	0.067	-0.037
	(0.120)	**(0.076)**	**(0.004)**	**(0.001)**	(0.174)	(0.947)	(0.130)	(0.942)	**(0.006)**	**(0.051)**	(0.506)	(0.552)	(0.281)	(0.899)	(0.447)	(0.774)	(0.821)
PS	**-0.413***	**-0.597***	**-0.479**	**-0.905***	**-1.081***	**-0.323***	**-1.173***	**-0.309***	**-0.549***	**-0.341**	-0.133	**-0.479***	**-0.405***	**-0.967***	**-0.206*	**-0.807***	**-0.446***
	(0.000)	**(0.001)**	**(0.041)**	**(0.002)**	**(0.000)**	**(0.001)**	**(0.000)**	**(0.001)**	**(0.000)**	**(0.015)**	(0.542)	**(0.000)**	**(0.000)**	**(0.002)**	**(0.706)**	**(0.000)**	**(0.000)**
Polgov	**-0.327***	-0.261	0.087	**-1.090***	**-0.835***	**-0.201**	**-1.612***	**-0.176**	**-0.544***	-0.057	-0.149	**-0.336***	**-0.301***	**-0.666**	-0.162	**-0.503***	**-0.287***
	(0.001)	(0.158)	(0.720)	**(0.000)**	**(0.001)**	**(0.028)**	**(0.001)**	**(0.040)**	**(0.000)**	(0.652)	(0.448)	**(0.000)**	**(0.001)**	**(0.030)**	(0.116)	**(0.002)**	**(0.001)**
RQ	0.397	0.506	**1.287**	0.044	0.418	0.254	0.477	0.303	0.311	0.369	-0.135	0.268	0.210	-0.190	0.211	**0.727***	**0.374**
	(0.108)	(0.109)	**(0.017)**	(0.884)	(0.227)	(0.269)	(0.330)	(0.127)	(0.314)	(0.137)	(0.759)	(0.171)	(0.285)	(0.768)	(0.317)	**(0.059)**	**(0.045)**
GE	-0.242	**-0.569***	-0.032	**-1.185**	-0.247	**-0.619***	**-1.739***	-0.243	-0.332	-0.280	0.187	**-0.440**	-0.305	**-1.628**	-0.163	**-0.769**	**-0.359***
	(0.341)	**(0.088)**	(0.945)	**(0.024)**	(0.537)	**(0.004)**	**(0.005)**	(0.206)	(0.242)	(0.342)	(0.673)	**(0.025)**	(0.122)	**(0.016)**	(0.471)	**(0.041)**	**(0.062)**
Ecogov	0.050	-0.005	0.314	-0.187	0.104	-0.136	-0.325	0.110	-0.024	0.062	0.015	-0.054	-0.029	-0.568	0.020	-0.033	0.007
	(0.700)	(0.976)	(0.231)	(0.379)	(0.626)	(0.251)	(0.360)	(0.916)	(0.872)	(0.668)	(0.945)	(0.600)	(0.773)	(0.113)	(0.856)	(0.882)	(0.939)
RL	-0.333	-0.273	0.499	**-1.793***	**-0.882**	-0.334	**-1.335**	-1.273	**-0.535***	0.082	0.195	**-0.616***	-0.248	**-1.243**	-0.204	-0.511	-0.299
	(0.183)	(0.447)	(0.299)	**(0.000)**	**(0.047)**	(0.133)	**(0.040)**	(0.160)	**(0.075)**	(0.774)	(0.676)	**(0.002)**	(0.217)	**(0.031)**	(0.376)	(0.167)	(0.121)
CC	0.080	0.357	**0.891***	-0.802	0.069	0.158	**-1.135***	0.194	0.188	**0.436***	0.350	0.030	0.137	-0.130	0.149	0.364	0.201
	(0.690)	(0.162)	**(0.007)**	(0.034)	(0.829)	(0.374)	**(0.067)**	(0.218)	(0.399)	**(0.056)**	(0.320)	(0.853)	(0.393)	(0.803)	(0.404)	(0.262)	(0.203)
Instigov	-0.045	0.098	**0.0455**	**-0.785***	-0.160	-0.011	**-0.728**	0.013	-0.032	0.179	0.156	-0.134	-0.001	-0.362	0.015	0.005	0.008
	(0.699)	(0.518)	**(0.020)**	**(0.000)**	(0.429)	(0.910)	**(0.024)**	(0.881)	(0.812)	(0.160)	(0.412)	(0.146)	(0.988)	(0.204)	(0.878)	(0.976)	(0.923)

Panel B: Transnational Terrorism

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		Africa
	Low	Mid	LMid	UMid	English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
VA	**-0.315***	0.231	**0.556**	**-0.985**	0.048	**-0.244**	0.012	**-0.184**	**-0.434***	0.072	-0.035	**-0.219***	-0.150	-0.220	**-0.317***	-0.015	-0.142
	(0.001)	(0.241)	**(0.020)**	**(0.019)**	(0.760)	**(0.030)**	(0.979)	**(0.022)**	**(0.001)**	(0.584)	(0.914)	**(0.000)**	(0.112)	(0.498)	**(0.003)**	(0.919)	(0.122)
PS	**-0.352***	**-0.326***	**-0.340**	-0.302	**-0.547***	**-0.313***	**-0.815***	**-0.310***	**-0.496***	**-0.226**	-0.307	**-0.362***	**-0.362***	**-0.507**	**-0.200**	**-0.536***	**-0.365***
	(0.000)	**(0.009)**	**(0.036)**	(0.181)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.013)**	(0.120)	**(0.000)**	**(0.000)**	**(0.023)**	**(0.002)**	**(0.000)**	**(0.000)**
Polgov	**-0.308***	-0.160	-0.006	**-0.454**	**-0.282***	**-0.272***	**-0.888***	**-0.254***	**-0.460***	-0.111	-0.195	**-0.310***	**-0.272***	**-0.463**	**-0.206***	**-0.364***	**-0.276***
	(0.000)	(0.218)	(0.967)	**(0.034)**	**(0.018)**	**(0.000)**	**(0.002)**	**(0.000)**	**(0.000)**	(0.181)	(0.273)	**(0.000)**	**(0.000)**	**(0.034)**	**(0.000)**	**(0.001)**	**(0.000)**
RQ	0.450	0.171	0.450	-0.029	**0.185**	-0.067	0.385	0.092	-0.050	0.204	0.217	0.026	0.218	-0.292	0.133	0.190	0.185
	(0.233)	(0.435)	(0.233)	(0.897)	**(0.036)**	(0.672)	(0.341)	(0.413)	(0.786)	(0.209)	(0.597)	(0.808)	(0.081)	(0.524)	(0.257)	(0.457)	(0.123)
GE	-0.095	-0.190	0.177	-0.698	-0.215	-0.203	**-0.931***	0.001	-0.138	-0.127	0.384	-0.188	-0.003	-0.886	0.066	-0.401	-0.095
	(0.488)	(0.415)	(0.579)	(0.079)	(0.380)	(0.172)	**(0.076)**	(0.986)	(0.415)	(0.506)	(0.341)	(0.083)	(0.976)	(0.069)	(0.599)	(0.109)	(0.434)
Ecogov	-0.010	-0.0006	0.178	-0.139	0.110	-0.089	-0.099	0.026	-0.053	0.042	0.173	-0.051	0.064	-0.375	0.059	-0.086	0.028
	(0.883)	(0.996)	(0.325)	(0.380)	(0.345)	(0.276)	(0.735)	(0.640)	(0.519)	(0.660)	(0.399)	(0.375)	(0.326)	(0.144)	(0.341)	(0.560)	(0.655)
RL	**-0.489***	0.113	0.497	-0.572	0.122	**-0.520***	-0.217	**-0.289***	**-0.634***	-0.058	0.176	**-0.395***	-0.134	-0.650	**-0.239**	-0.215	-0.191
	(0.000)	(0.653)	(0.134)	(0.122)	(0.615)	**(0.001)**	(0.689)	**(0.009)**	**(0.000)**	(0.755)	(0.679)	**(0.000)**	(0.294)	(0.118)	**(0.062)**	(0.381)	(0.117)
CC	-0.103	0.250	**0.425***	0.075	**0.333***	-0.092	0.429	-0.061	-0.030	0.137	0.368	-0.085	0.050	-0.105	-0.040	0.350	0.055
	(0.358)	(0.162)	**(0.067)**	(0.795)	**(0.057)**	(0.447)	(0.406)	(0.495)	(0.822)	(0.358)	(0.251)	(0.347)	(0.626)	(0.778)	(0.682)	(0.102)	(0.583)
Instigov	**-0.151**	0.125	**0.263***	-0.102	**0.183***	**-0.141**	0.083	**-0.087***	**-0.152***	0.063	0.159	**-0.126**	-0.010	-0.203	-0.064	0.074	-0.022
	(0.016)	(0.235)	**(0.052)**	(0.563)	**(0.095)**	**(0.036)**	(0.758)	**(0.083)**	**(0.061)**	(0.447)	(0.358)	**(0.013)**	(0.862)	(0.321)	(0.252)	(0.532)	(0.693)

Panel C: Unclear Terrorism

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		Africa
	Low	Mid	LMid	UMid	English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
VA	**-0.225***	0.111	**0.335**	-0.755	-0.045	**-0.199**	-0.135	**-0.145**	**-0.382***	0.076	-0.299	**-0.141***	-0.124	**-0.454**	**-0.231**	-0.022	**-0.132***
	(0.004)	(0.525)	**(0.026)**	(0.236)	(0.788)	**(0.016)**	(0.732)	**(0.040)**	**(0.000)**	(0.502)	(0.193)	**(0.080)**	(0.123)	**(0.049)**	**(0.024)**	(0.862)	**(0.091)**

PS	-0.061	**-0.250****	-0.085	**-0.774****	**-0.449*****	-0.060	**-0.478****	-0.040	-0.075	-0.127	-0.087	**-0.097***	-0.079	**-0.454*****	-0.071	**-0.183***	**-0.116****
	(0.242)	**(0.025)**	(0.403)	**(0.020)**	**(0.002)**	(0.232)	**(0.018)**	(0.405)	(0.258)	(0.110)	(0.534)	**(0.072)**	(0.129)	**(0.004)**	(0.248)	**(0.061)**	**(0.025)**
Polgov	**-0.011****	-0.150	0.090	**-0.720****	**-0.281****	**-0.098****	**-0.576****	**-0.074***	**-0.173*****	-0.048	-0.138	**-0.113****	**-0.090***	**-0.532*****	**-0.106***	-0.132	**-0.119****
	(0.016)	(0.194)	(0.396)	**(0.024)**	**(0.031)**	**(0.034)**	**(0.019)**	**(0.081)**	**(0.004)**	(0.503)	(0.271)	**(0.023)**	**(0.057)**	**(0.000)**	**(0.053)**	(0.151)	**(0.012)**
RQ	-0.061	0.193	**0.633*****	-0.065	0.217	-0.106	0.083	-0.034	-0.099	0.081	-0.143	-0.034	-0.051	-0.430	-0.071	0.223	0.005
	(0.592)	(0.327)	**(0.007)**	(0.849)	(0.291)	(0.363)	(0.810)	(0.727)	(0.517)	(0.562)	(0.611)	(0.744)	(0.630)	(0.191)	(0.524)	(0.295)	(0.957)
GE	-0.113	0.031	**0.373***	0.011	0.240	**-0.218****	-0.658	-0.059	-0.206	0.112	0.098	-0.143	-0.051	-0.493	-0.037	-0.133	-0.100
	(0.333)	(0.947)	**(0.062)**	(0.985)	(0.371)	**(0.046)**	(0.144)	(0.537)	(0.142)	(0.501)	(0.729)	(0.178)	(0.633)	(0.163)	(0.754)	(0.523)	(0.337)
Ecogov	-0.053	0.071	**0.295*****	-0.032	0.150	**-0.105***	-0.179	-0.028	-0.095	0.062	-0.012	-0.055	-0.030	-0.302	-0.032	0.029	-0.029
	(0.378)	(0.520)	**(0.009)**	(0.891)	(0.234)	**(0.079)**	(0.476)	(0.575)	(0.212)	(0.452)	(0.930)	(0.321)	(0.578)	(0.102)	(0.586)	(0.809)	(0.592)
RL	**-0.215***	-0.206	**0.383***	**-1.483*****	-0.173	**-0.284****	-0.562	**-0.215****	**-0.254***	-0.097	-0.218	**-0.304*****	**-0.197***	**-0.547***	**-0.277****	-0.104	**-0.236****
	(0.016)	(0.356)	**(0.065)**	**(0.006)**	(0.513)	**(0.011)**	(0.225)	**(0.026)**	**(0.087)**	(0.549)	(0.466)	**(0.004)**	**(0.071)**	**(0.067)**	**(0.024)**	(0.611)	**(0.024)**
CC	-0.075	0.251	**0.332****	0.217	0.251	-0.049	-0.255	0.034	-0.008	0.211	-0.209	0.087	0.024	-0.103	-0.012	0.212	0.048
	(0.429)	(0.115)	**(0.022)**	(0.613)	(0.189)	(0.584)	(0.565)	(0.663)	(0.936)	(0.104)	(0.353)	(0.323)	(0.781)	(0.701)	(0.895)	(0.237)	(0.596)
Instigov	-0.077	0.066	**0.205****	-0.254	0.080	-0.076	-0.233	-0.034	-0.059	0.057	-0.111	-0.038	-0.033	-0.176	-0.061	0.051	-0.034
	(0.146)	(0.484)	**(0.016)**	(0.332)	(0.504)	(0.123)	(0.315)	(0.436)	(0.379)	(0.426)	(0.360)	(0.437)	(0.498)	(0.231)	(0.255)	(0.604)	(0.473)

Panel D: Total Terrorism

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		Africa
	Low	Mid	LMid	UMid	English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
VA	**-0.484*****	**0.520***	**1.066*****	**-1.818*****	-0.350	-0.165	-0.605	-0.129	**-0.842*****	0.338	-0.197	-0.216	**-0.267***	-0.059	**-0.348***	-0.011	-0.151
	(0.000)	**(0.073)**	**(0.003)**	**(0.001)**	(0.218)	(0.363)	(0.271)	(0.405)	**(0.000)**	(0.106)	(0.632)	(0.175)	**(0.094)**	(0.901)	**(0.097)**	(0.961)	(0.324)
PS	**-0.563*****	**-0.584*****	**-0.499****	**-0.789****	**-1.085*****	**-0.429*****	**-1.239*****	**-0.433*****	**-0.737*****	**-0.349****	-0.224	**-0.599*****	**-0.516*****	**-1.042*****	**-0.301****	**-0.893*****	**-0.549*****
	(0.000)	**(0.002)**	**(0.039)**	**(0.010)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.016)**	(0.367)	**(0.000)**	**(0.000)**	**(0.001)**	**(0.017)**	**(0.000)**	**(0.000)**
Polgov	**-0.486*****	-0.241	0.107	**-0.996*****	**-0.814*****	**-0.321*****	**-1.593*****	**-0.297*****	**-0.749*****	-0.083	-0.191	**-0.459*****	**-0.405*****	**-0.773****	**-0.275****	**-0.599*****	**-0.393*****
	(0.000)	(0.207)	(0.671)	**(0.001)**	**(0.000)**	**(0.001)**	**(0.000)**	**(0.001)**	**(0.000)**	(0.529)	(0.392)	**(0.000)**	**(0.000)**	**(0.016)**	**(0.014)**	**(0.000)**	**(0.000)**
RQ	0.295	0.498	**1.226****	0.041	0.478	0.150	0.653	0.252	0.132	0.383	0.167	0.182	0.269	-0.216	0.213	**0.633***	**0.385***
	(0.268)	(0.127)	**(0.028)**	(0.895)	(0.163)	(0.554)	(0.176)	(0.243)	(0.690)	(0.138)	(0.740)	(0.380)	(0.202)	(0.750)	(0.354)	**(0.098)**	**(0.054)**
GE	-0.249	-0.523	0.023	**-1.172****	-0.225	**-0.598****	-1.742	-0.158	-0.415	-0.221	0.477	-0.434	-0.186	**-1.912*****	-0.071	**-0.844****	-0.294
	(0.364)	(0.123)	(0.961)	**(0.031)**	(0.614)	**(0.012)**	(0.005)	(0.449)	(0.184)	(0.470)	(0.345)	(0.038)	(0.380)	**(0.007)**	(0.773)	**(0.024)**	(0.150)
Ecogov	0.016	0.003	0.318	-0.186	0.142	-0.159	-0.224	0.022	-0.099	0.084	0.187	-0.079	0.024	**-0.665***	0.046	-0.096	0.030
	(0.906)	(0.984)	(0.239)	(0.398)	(0.500)	(0.225)	(0.524)	(0.837)	(0.556)	(0.579)	(0.467)	(0.473)	(0.825)	**(0.077)**	(0.704)	(0.663)	(0.777)
RL	**-0.596****	-0.228	0.606	**-1.847*****	**-0.852***	**-0.544****	-0.991	**-0.397***	**-0.813****	0.029	0.351	**-0.728*****	-0.300	**-1.326****	**-0.350***	-0.562	**-0.359***
	(0.027)	(0.538)	(0.221)	**(0.000)**	**(0.052)**	**(0.027)**	(0.125)	**(0.060)**	**(0.013)**	(0.921)	(0.511)	**(0.000)**	(0.164)	**(0.029)**	(0.163)	(0.125)	**(0.078)**
CC	-0.008	0.406	**0.931*****	-0.620	0.171	0.106	-0.778	0.154	0.152	**0.393***	0.387	0.025	0.161	-0.341	0.104	0.193	0.104
	(0.970)	(0.124)	**(0.007)**	(0.117)	(0.591)	(0.589)	(0.207)	(0.368)	(0.535)	**(0.098)**	(0.336)	(0.885)	(0.350)	(0.535)	(0.592)	(0.249)	(0.592)
Instigov	-0.139	0.126	**0.491****	**-0.716*****	-0.105	-0.073	-0.519	-0.029	-0.109	0.152	0.196	**-0.163***	-0.003	-0.459	-0.031	0.020	-0.008
	(0.266)	(0.418)	**(0.015)**	**(0.002)**	(0.598)	(0.501)	(0.107)	(0.763)	(0.467)	(0.252)	(0.365)	**(0.097)**	(0.972)	(0.125)	(0.775)	(0.909)	(0.931)

*,**,***: significance levels of 10%, 5% and 1% respectively. Significant values are highlighted in bold. Low: Low Income countries. Mid: Middle Income countries. LMid: Lower Middle Income countries. UMid: Upper Middle Income countries. English: English Common law countries. French: French Civil law countries. Oil: Petroleum Exporting countries. NOil: Non-petroleum Exporting countries. Closed: Landlocked countries. Open: Countries open to the sea. Conf: Conflict Affected countries. NConf: Countries not Affected by Conflicts. SSA: Sub-Saharan Africa. NA: North Africa. Chrit: Christian dominated countries. Islam: Muslim dominated countries. VA: Voice & Accountability. PS: Political Stability. Polgov: Political Governance. RQ: Regulation Quality. GE: Government Effectiveness. Ecogov: Economic Governance. RL: Rule of Law. CC: Corruption-Control. Instigov: Institutional Governance. Control variables used in Tables 2-4 are included in the estimation of results reported in Table 5. They are not disclosed because of space constraint. The control variables, information criteria and observations are available upon request.

4.2 Comparative economics of governance in terrorism

The following comparative findings are established for domestic terrorism. (i) Voice and accountability significantly increases (decreases) terrorism middle-income, low-middle income and coastal countries (upper-middle income and landlocked countries). (ii) With the exception of conflict-affected countries, political stability consistently decreases terrorism, with the following order of increasing negative magnitude: Christian-dominated, resource-poor, French civil law, coastal, sub-Saharan African, low-income, African, conflict-free, lower-middle income, landlocked, middle-income, Islam-dominated, upper-middle income, North African, English common law and resource-rich countries. (iii) While, the effect of political governance is insignificant in middle-income, lower-middle income, coastal, conflict-affected and Christian-dominated countries, the following negative effects are established in increasing order of negative magnitude: resource-poor, French civil law, African, SSA, low-income, conflict-free, Islam-dominated, landlocked, North Africa, English common law, upper middle income and resource-rich countries. (iv) Positive effects are apparent from regulation quality in lower-middle income, Islam-dominated and African countries. (v) The following significant results are observed from governance effectiveness, in increasing order of negative magnitude: African, conflict-free, middle-income, French civil law, Islam-dominated, upper-middle income, North African and resource-rich countries. (vi) There are no significant estimates from economic governance regressions. (vii) Significant negative effects from the rule of law are established in landlocked, conflict-free, English common law, North African, resource-rich and upper-middle income countries (in increasing negative magnitude). (viii) Corruption-control has a positive (negative) in lower middle income and coastal (resource-rich) countries. (ix) Institutional governance has a positive (negative) effect in lower middle income (upper middle income and resource-rich) countries.

We observe the following comparative findings for transnational terrorism. (i) Voice and accountability is positive on lower middle income countries and negative with an increasing order of negative magnitude in the following features: resource-poor, conflict-free, French civil law, Christian-dominated, low-income, landlocked and upper middle income countries. (ii) With the exceptions of upper middle income and conflict-affected countries, political stability negatively affects transnational terrorism in the following order of increasing negative magnitude: Christian-dominated, coastal, resource-poor, French civil-law, middle income, lower-middle income, low income, conflict-free, SSA, African, landlocked, North African, Islam-dominated, English common law and resource-rich countries. (iii) But

for middle-income, lower middle income, coastal and conflict-affected countries, the negative effect is apparent in the following features with increasing negative magnitude: Christian-dominated and resource-poor, French civil law, SSA, African, English common law, low income, conflict-free, Islam-dominated, upper middle income, landlocked, North African and resource-rich countries. (iv) Regulation quality (government effectiveness) is exclusively positively (negatively) significant in English common law (resource-rich) countries while the incidence of economic governance is consistently insignificant. (v) The effect of the rule of law is negatively significant in some features with the following order of increasing negative magnitude: Christian-dominated, resource-poor, conflict-free, low-income, French civil law and landlocked countries. (vi) Corruption-control is positively significant in English common law and lower middle income countries. (vii) Whereas institutional governance also positively influences English common law and lower middle income countries, the following show negative effects with increasing negative magnitude: resource-poor, conflict-free, French civil law, low income and landlocked countries.

The following comparative findings are established for unclear terrorism (i) Voice and accountability is positive in lower middle income countries but negative with the following increasing order of negative magnitude in a significant number of fundamental features: African, conflict-free, resource-poor, French civil law, low-income, Christian-dominated, landlocked and North African countries. (ii) Otherwise stated, all are negatively significant in increasing order of negative magnitude. Political stability: conflict-free, African, Islam-dominated, middle-income, English common law, North African, resource-rich and upper middle income countries. (iii)Political governance: low-income, resource-poor, SSA, French civil law, Christian-dominated, conflict-free, African, landlocked, English common law, North African, resource-rich and upper middle income countries. (iv) Regulation quality, corruption-control and institutional governance are exclusively positively significant in upper middle income countries whereas government effectiveness and economic governance are positively (negatively) significant in lower middle income (French civil law) countries. (v) While the rule of law is positive in middle income countries, it is negative in other fundamental features: SSA, resource-poor, low-income, African, landlocked, Christian-dominated, French civil law, conflict-free, North African and upper middle income countries.

The following comparative findings are established for total terrorism (i) Voice and accountability is positive in middle income and lower middle income countries but negative in the following features: SSA, Christian-dominated, low-income, landlocked and upper middle

income countries. (ii) Political stability, with the exception of conflict-affected countries where the effect is not significant, negative effects are apparent in: Christian-dominated, coastal, French civil law, resource-poor, lower middle income, SSA, African, low income, middle income, conflict-free, landlocked, upper-middle income, Islam-dominated, North Africa, English common law and resource-rich countries. (iii) Political governance: Christian-dominated, resource-poor, French civil law, African, SSA, conflict-free, low-income, Islam-dominated, landlocked, North African, English common law, upper-middle-income and resource-rich countries. (iv) Regulation quality is positively significant in lower middle income, Islam-dominated and African countries. (v) Government effectiveness has negative effects in the following features: French civil law, Islam-dominated, upper middle income and North African countries. (vii) Economic governance (Corruption-control) is exclusively negatively (positively) significant in North African (lower middle income and coastal) countries whereas institutional governance is positive in lower middle income countries but negative in conflict-free and upper middle income countries.

4.3 Further discussing of results

Some of the findings are expected, others are not while some are conflicting. The conflicting tendency builds on the fact that the edge of governance in fighting terrorism may not be consistent across terrorism and governance dynamics. In what follows, the established findings are discussed in more depth.

First, the projected dominance of higher income countries compared to their lower income counterparts, in the ability to fight terrorism through governance channels, is not consistently apparent. This finding indirectly raises the concern about whether higher income countries in Africa are necessarily associated with higher levels of governance. It is important to note that we do not expect assumptions underpinning the distinction of countries by income levels to be 100% accurate, which is the reason an empirical exercise is needed to either validate or reject them.

Second, the dominance of English common law countries vis-à-vis their French civil law counterparts is confirmed for the most part. Exceptions to this tendency may be traceable to mainstream criticisms of some of the hypotheses underpinning the distinction of nations in terms of legal origins. The following criticisms have been documented on the distinction of countries in terms of legal origins (Deakin & Siems 2010; Fowowe, 2014; Asongu, 2015). (i) Doubts have been expressed in scholarly circles on the statistical fragility of distinguishing

countries in the contemporary era based on historical information. (ii) With the advent of globalisation and internationalization, distinctions in comparative development on the basis of legal origins are less persuasive. (iii) The stratification of countries by means of Common law versus Civil law does not account for *inter alia*: the influence of transplant law as well as the post-transplant period on the one hand and on the other hand, mixtures when foreign laws were being adopted by former colonies.

Third, the overwhelming dominance of resource-rich countries is consistent with expectations. However, the few exceptions should be seen in the light of the fact that petroleum-wealth could also be directly associated with terrorists attacks if the fruits of petroleum exports are not evenly distributed across the population. This is the case of the Niger Delta in Nigeria. Moreover, some countries in the world that have acknowledged scarcity in natural resources have focused more on improving governance standards and preventing civil conflict through consensus-building (America, 2013; Amavilah, 2015). Rwanda and Mauritius are some examples in Africa.

Fourth, the assumption underpinning the institutional cost associated with landlockedness and by extension, less effective use of governance mechanisms to fight terrorism, does not withstand empirical scrutiny. This leads to two main inferences. On the one hand, governance standards in landlocked countries may not be significantly lower compared to their coastal counterparts. On the other hand, given that landlocked countries in Africa substantially rely on the seaports of neighboring countries (and road traffic) for the import of heavy equipment and other material needed for the implementation of sound governance standards, the time wasted and associated institutional cost (from land transport) do not significantly deter their capacities to fight terrorism. Such insignificance may be apparent when air transport is used for emergency cases and sea transport (via neighboring countries) used for preventive measures.

Fifth, the findings based on conflict-affected countries against their non-affected counterparts are the most consistent. This is essentially because the ability of countries not affected by conflicts to use governance mechanisms in the fight against terrorism is significantly higher. In essence, politically-stable countries are likely to provide a more enabling environment for governance and economic development (Asongu, 2018). This narrative is consistent with Beegle *et al*. (2016, p.10), who have argued that; state fragility is significantly linked with less development. By extension, terrorism may also be a product of less effective governance and economic development. This is essentially because civil wars, political strife and state fragility diminish suitable conditions for *inter alia*: (i) the election and

replacement of political leaders (i.e. political governance); (ii) the formulation and implementation of policies that deliver public commodities (i.e. economic governance) and (iii) the respect of citizens and the State of institutions that govern interactions between them (i.e. institutional governance).

Sixth, the comparative edge of North African countries in relation to their counterparts south of the Sahara is consistent with the findings pertaining to political instability and conflicts in the preceding paragraph. Accordingly, the relative inability of SSA countries builds on the fact that violence and political instability have been associated with the sub-region. As summarized by Asongu (2014c): *"seven of the nine cases of total chaos and societal breakdowns known in recent history have been registered in Africa (with the exceptions of Afghanistan and Syria): Angola, Burundi, Sierra Leone, Liberia, Zaire/Congo, Somalia, and Sudan"* (p.1569).

Seventh, in the light of the narrative in the preceding paragraph, while the relative importance of Islam-dominated countries may build on the relevance of North Africa (which is exclusively Islam-dominated countries), the underpinnings associating Christianity with the protestant ethnic (and by extension higher levels of governance and more effective battle against terrorism) does not withstand empirical scrutiny. Accordingly, the Protestant ethnic which is more associated with Christianity-dominated countries may also be linked to more avenues of civil unrests and strikes. Consistent with Weber (2002) (first published in 1930), the Protestant ethic influences citizens to adopt attitudes that are contrary to mainstream thinking and by extension, also deviate from established societal norms. In weak democracies, such protestant ethic could weaken instead of consolidate governance standards.

5. Concluding implication, caveats and further research directions

We set-out to assess the comparative economics of governance in fighting terrorism in 53 African countries for period 1996-2012. Four terrorism variables are used, namely: domestic, transnational, unclear and total terrorism dynamics. Nine bundled and unbundled governance variables are employed, notably: political stability/no violence, voice & accountability, political governance, government effectiveness, regulation quality, economic governance, corruption-control, the rule of law and institutional governance. The empirical evidence is based on Fixed Effects regressions. In the analytical procedure, we have first bundled governance indicators by means of principal component analysis before engaging the empirical exercise with the full sample. In the final step, specifications are based on a

decomposed full sample in order to articulate the fundamental characteristics for comparative purposes.

The following broad findings have been established. First, good governance is an appealing tool in fighting terrorism. Second, the relevance of the good governance dynamics is as follows in order of increasing relevance: economic governance, institutional governance and political governance. The findings are presented in increasing order of magnitude to emphasise fundamental features in which governance dynamics have the highest effect in mitigating terrorism.

A caveat to this study is that, state-sponsored terrorism is not considered in the conception and definition of terrorism. This is essentially because terrorism is defined as "*the actual or threatened use of force by sub-national actors with the purpose of employing intimidation to meet political objectives*". This definition therefore does not take on board state-sponsored terrorism. The failure to incorporate this dimension of terrorism complicates the measurement and analysis of the governance-terrorism nexus covered in this study. Unfortunately, addressing this caveat is beyond the scope of this research because of data availability constraints. Accordingly to the best of our knowledge, data on state-sponsored terrorism is not available.

Future studies would improve the extant literature by investigating what policy variables can interact with inclusive human development to reduce terrorism. Moreover, assessing the how political governance is relevant in mitigating terrorism throughout the conditional distributions of terrorism is also worthwhile for two main reasons. On the one hand, it is overwhelmingly significant across fundamental characteristics. On the other hand, its effectiveness may be contingent on initial levels of terrorism. Quantile regressions can be used to assess the underlying relationships throughout the conditional distributions of terrorism. Furthermore, random effects (also known as mixed effects or multi-level models) could be considered when variables show less variability as apparent in Appendix 4. Insights into how such random effects models can be taken on board are available in Gelman and Hill (2006) and Allison (2009).

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Appendices
Appendix 1: Definitions of variables

Variables	Signs	Definitions of variables (Measurements)	Sources
Political Stability	PS	"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	VA	"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	GE	"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
Domestic terrorism	Domter	Number of Domestic terrorism incidents (in Ln)	
Transnational terrorism	Tranter	Number of Transnational terrorism incidents (in Ln)	Ender et al. (2011) and Gailbulloev et al. (2012)
Uuclear terrorism	Unclter	Number of terrorism incidents whose category in unclear (in Ln)	
Total terrorism	Totter	Total number of terrorism incidents (in Ln)	
Internet	Internet	Internet penetration (per 100 people)	World Bank (WDI)
Inclusive development	IHDI	Inequality Adjusted Human Development Index	UNDP
Growth	GDPg	Gross Domestic Product (GDP) growth rates (annual %)	World Bank (WDI)
Inflation	Inflation	Consumer Price Index (annual %)	World Bank (WDI)
Military Expense	Milit	Military Expenditure (% of GDP)	World Bank (WDI)

WDI: World Bank Development Indicators. WGI: World Bank Governance Indicators.   PCA: Principal Component Analysis. UNDP: United Nations Development Program. Ln: Natural logarithm.

Appendix 2: Summary statistics (1996-2012)

	Mean	SD	Minimum	Maximum	Observations
Political Stability	-0.550	0.948	-3.220	1.188	742
Voice & Accountability	-0.681	0.732	-2.233	1.026	742
Political Governance	0.000	1.283	-3.420	2.770	742
Government Effectiveness	-0.727	0.628	-2.454	0.951	740
Regulation Quality	-0.699	0.643	-2.668	0.983	742
Economic Governance	0.0002	1.365	-4.102	3.739	740
Rule of Law	-0.710	0.666	-2.670	1.055	742
Control of Corruption	-0.601	0.591	-2.057	1.249	741
Institutional Governance	-0.002	1.364	-3.656	3.676	741
Domestic terrorism	0.414	0.892	0.000	6.234	901
Transnational terrorism	0.221	0.541	0.000	3.332	901
Unclear terrorism	0.097	0.389	0.000	4.888	901
Total terrorism	0.540	1.002	0.000	6.300	901
Internet penetration	4.243	7.773	0.000	55.416	874
Inclusive development	0.912	4.448	0.127	45.325	687
GDP growth	5.080	9.317	-62.075	149.973	875
Inflation	16.586	150.256	-9.797	4145.108	803
Military Expenditure	2.278	3.034	0.145	39.606	722

S.D: Standard Deviation.

Appendix 3: Correlation analysis (uniform sample size: 471)

Political governance			Economic governance			Institutional governance			Control variables					Terrorism variables				
PS	VA	Polgov	GE	RQ	Ecogov	CC	RL	Instgov	Internet	IHDI	GDPg	Inflation	Milit	Domter	Tranter	Unclter	Totter	
1.000	0.640	0.906	0.654	0.640	0.670	0.707	0.773	0.765	0.205	0.028	0.005	-0.191	-0.238	-0.492	-0.492	-0.265	-0.554	PS
	1.000	0.904	0.677	0.727	0.725	0.679	0.736	0.731	0.183	0.190	0.004	-0.113	-0.292	-0.212	-0.257	-0.078	-0.256	VA
		1.000	0.735	0.754	0.770	0.765	0.833	0.826	0.214	0.120	0.005	-0.168	-0.292	-0.389	-0.414	-0.190	-0.448	Polgov
			1.000	0.865	0.969	0.860	0.895	0.908	0.383	0.223	0.023	-0.139	-0.131	-0.175	-0.228	-0.068	-0.211	GE
				1.000	0.962	0.781	0.856	0.847	0.329	0.175	-0.019	-0.188	-0.177	-0.152	-0.211	-0.053	-0.195	RQ
					1.000	0.852	0.908	0.910	0.370	0.207	0.003	-0.168	-0.158	-0.170	-0.228	-0.063	-0.211	Ecogov
						1.000	0.867	0.967	0.275	0.200	-0.025	-0.158	-0.081	-0.216	-0.277	-0.104	-0.268	CC
							1.000	0.965	0.354	0.119	-0.007	-0.159	-0.153	-0.256	-0.283	-0.133	-0.301	RL
								1.000	0.324	0.166	-0.017	-0.164	-0.120	-0.244	-0.290	-0.123	-0.294	Instgov
									1.000	0.002	-0.053	-0.057	-0.067	0.076	0.025	0.041	0.053	Internet
										1.000	-0.045	-0.011	-0.026	0.142	0.036	0.174	0.149	IHDI
											1.000	-0.143	-0.101	-0.010	0.003	-0.072	-0.016	GDPg
												1.000	-0.081	0.006	0.146	0.087	0.068	Inflation
													1.000	0.141	0.081	0.081	0.155	Milit
														1.000	0.580	0.625	0.957	Domter
															1.000	0.461	0.743	Tranter
																1.000	0.664	Unclter
																	1.000	Totter

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. Internet: Internet Penetration. IHDI: Inequality Adjusted Human Development Index. GDPg: Gross Domestic Product Growth. Milit: Military Expenditure. Domter: Domestic Terrorism. Tranter: Transnational Terrorism. Unclter: Unclear Terrorism. Totter: Total Terrorism.

Appendix 4: Categorization of Countries

Categories	Panels	Countries	Num
Income levels	Middle Income	Algeria, Angola, Botswana, Cameroon, Cape Verde, Côte d'Ivoire, Egypt, Equatorial Guinea, Gabon, Lesotho, Libya, Mauritius, Morocco, Namibia, Nigeria, Sao Tome & Principe, Senegal, Seychelles, South Africa, Sudan, Swaziland, Tunisia.	22
	Low Income	Benin, Burkina Faso, Burundi, Central African Republic, Chad, Comoros, Congo Democratic Republic, Congo Republic, Djibouti, Eritrea, Ethiopia, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Madagascar, Malawi, Mali, Mauritania, Mozambique, Niger, Rwanda, Sierra Leone, Somalia, Tanzania, Togo, Uganda, Zambia, Zimbabwe.	31
Legal Origins	English Common-law	Botswana, The Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mauritius, Namibia, Nigeria, Seychelles, Sierra Leone, Somalia, South Africa, Sudan, Swaziland, Tanzania, Uganda, Zambia, Zimbabwe.	20
	French Civil-law	Algeria, Angola, Benin, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo Democratic Republic, Congo Republic, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Guinea, Guinea-Bissau, Libya, Madagascar, Mali, Mauritania, Morocco, Mozambique, Niger, Rwanda, Sao Tomé & Principe, Senegal, Togo, Tunisia.	33
Regions	Sub-Saharan Africa	Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Central African Republic, Comoros, Congo Democratic Republic, Congo Republic, Côte d'Ivoire, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritius, Mozambique, Namibia, Niger, Nigeria, Senegal, Sierra Leone, Somalia, Sudan, Rwanda, Sao Tomé & Principe, Seychelles, South Africa, Swaziland, Tanzania, Togo, Uganda, Zambia, Zimbabwe.	47
	North Africa	Algeria, Egypt, Libya, Mauritania, Morocco, Tunisia.	6
Religion	Christianity	Angola, Benin, Botswana, Burundi, Cameroon, Cape Verde, Central African Republic, Congo Democratic Republic, Congo Republic, Côte d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Rwanda, Sao Tomé & Principe, Seychelles, South Africa, South Africa, Tanzania, Togo, Uganda, Zambia, Zimbabwe.	33
	Islam	Algeria, Burkina Faso, Chad, Comoros, Djibouti, Egypt, The Gambia, Guinea, Guinea Bissau, Libya, Mali, Mauritania, Morocco, Niger, Nigeria, Senegal, Sierra Leone, Somalia, Sudan, Tunisia,	20
Resources	Petroleum Exporting	Algeria, Angola, Cameroon, Chad, Congo Republic, Equatorial Guinea, Gabon, Libya, Nigeria, Sudan.	10
	Non-Petroleum Exporting	Benin, Botswana, Burkina Faso, Burundi, Cape Verde, Central African Republic, Comoros, Congo Democratic Republic, Côte d'Ivoire, Djibouti, Eritrea, Ethiopia, Egypt, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger, Senegal, Sierra Leone, Somalia, Rwanda, Sao Tomé & Principe, Seychelles, South Africa, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia, Zimbabwe.	43
Stability	Conflict	Angola, Burundi, Chad, Central African Republic, Congo Democratic Republic, Côte d'Ivoire, Liberia, Nigeria, Sierra Leone, Somalia, Sudan, Zimbabwe.	12
	Non-Conflict	Algeria, Benin, Botswana, Burkina Faso, Cameroon, Cape Verde, Comoros, Congo Republic, Djibouti, Egypt, Equatorial Guinea, Eritrea, Ethiopia, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Libya, Madagascar, Malawi, Mali, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Niger,	41

			Num
		Senegal, Rwanda, Sao Tomé & Principe, Seychelles, South Africa, Swaziland, Tanzania, Togo, Tunisia, Uganda, Zambia.	
Openness to Sea	Landlocked	Botswana, Burkina Faso, Burundi, Chad, Central African Republic, Ethiopia, Lesotho, Malawi, Mali, Niger, Rwanda, Swaziland, Uganda, Zambia, Zimbabwe	15
	Not landlocked	Algeria, Angola, Benin, Cameroon, Cape Verde, Comoros, Congo Democratic Republic, Congo Republic, Côte d'Ivoire, Djibouti, Egypt, Equatorial Guinea, Eritrea, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Liberia, Libya, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Namibia, Nigeria, Senegal, Sierra Leone, Somalia, Sudan, Sao Tomé & Principe, Seychelles, South Africa, Tanzania, Togo, Tunisia.	38

Num: Number of cross sections (countries)

Appendix 5: Differences in means of fundamental characteristics

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		
Low	Mid	LMid	UMid		English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
na	(0.005)	(0.000)	(0.000)	(0.000)	(0.362)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)	(0.385)	(0.000)	Low
	na	(0.000)	(0.000)	(0.362)	(0.000)	(0.000)	(0.000)	(0.004)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.381)	Mid
		na	(0.341)	(0000)	(0.000)	(0.232)	(0.000)	(0.163)	(0.000)	(1.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	LMid
			na	(0.000)	(0.000)	(1.000)	(0.000)	(0.095)	(0.000)	(0.341)	(0.000)	(0.000)	(0.009)	(0.000	(0.000)	UMid
				na	(0.000)	(0.000)	(0.000)	(0.014)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(1.000)	(0.000)	English
					na	(0.000)	(0.000)	(0.000)	(0.014)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	French
						na	(0.000)	(0.019)	(0.000)	(0.232)	(0.000)	(0.009)	(0.000)	(0.000)	(0.000)	Oil
							na	(0.000)	(0.019)	(0.000)	(0.232)	(0.009)	(0.000)	(0.000)	(0.000)	NOil
								na	(0.000)	(0.124)	(0.000)	(0.000)	(0.000)	(0.031)	(0.000)	Closed
									na	(0.000)	(0.124)	(0.000)	(0.000)	(0.031)	(0.000)	Open
										na	(0.000)	(0.000)	(0.001)	(0.000)	(0.000)	Conf
											na	(0.001)	(0.000)	(0.000)	(0.000)	NConf
												na	(0.000)	(0.000)	(0.000)	SSA
													na	(0.000)	(0.000)	NA
														na	(0.000)	Chrit
															na	Islam

Low: Low Income countries. Mid: Middle Income countries. LMid: Lower Middle Income countries. UMid: Upper Middle Income countries. English: English Common law countries. French: French Civil law countries. Oil: Petroleum Exporting countries. NoOil: Non-petroleum Exporting countries. Closed: Landlocked countries. Open: Countries open to the sea. Conf: Conflict Affected countries. NoConf: Countries not Affected by Conflicts. SSA: Sub-Saharan Africa. NA: North Africa. Chrit: Christian dominated countries. Islam: Muslim dominated countries. Null Hypothesis: Difference in means =0. P-values in brackets. Bold values represent significant differences in means at the 1%, 5% and 10% significance levels.

Appendix 6: Differences in means of fundamental characteristics in terrorism dynamics

Panel A: Domestic Terrorism

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		
Low	Mid	LMid	UMid		English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
na	(0.013)	(0.000)	(0.000)	(0.000)	(0.723)	(0.000)	(0.000)	(0.000)	(0.216)	(0.000)	(0.139)	(0.000)	(0.000)	(0.803)	(0.002)	Low
	na	(0.000)	(0.000)	(0.723)	(0.000)	(0.000)	(0.000)	(0.216)	(0.000)	(0.139)	(0.000)	(0.000)	(0.000)	(0.002)	(0.803)	Mid
		na	(0.001)	(0.055)	(0.000)	(0.140)	(0.000)	(0.438)	(0.000)	(0.432)	(0.000)	(0.000)	(0.000)	(0.000)	(0.005)	LMid
			na	(0.000)	(0.000)	(0.005)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.696)	(0.000)	(0.000)	UMid
				na	(0.003)	(0.002)	(0.000)	(0.258)	(0.000)	(0.205)	(0.000)	(0.000)	(0.000)	(0.000)	(0.597)	English
					na	(0.000)	(0.002)	(0.258)	(0.000)	(0.205)	(0.000)	(0.000)	(0.597)	(0.000)	(0.000)	French
						na	(0.000)	(0.000)	(0.052)	(0.017)	(0.000)	(0.000)	(0.030)	(0.000)	(0.000)	Oil
							na	(0.000)	(0.052)	(0.000)	(0.017)	(0.030)	(0.000)	(0.000)	(0.000)	NOil
								na	(0.000)	(0.000)	(0.904)	(0.000)	(0.000)	(0.149)	(0.000)	Closed
									na	(0.000)	(0.904)	(0.000)	(0.000)	(0.149)	(0.000)	Open
										na	(0.000)	(0.000)	(0.000)	(0.000)	(0.079)	Conf
											na	(0.000)	(0.000)	(0.079)	(0.000)	NConf
												na	(0.000)	(0.000)	(0.000)	SSA
													na	(0.000)	(0.000)	NA
														na	(0.031)	Chrit
															na	Islam

Panel B: Transnational Terrorism

	Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		
Low	Mid	LMid	UMid		English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
na	(0.047)	(0.002)	(0.000)	(0.000)	(0.250)	(0.000)	(0.001)	(0.000)	(0.234)	(0.001)	(0.702)	(0.000)	(0.000)	(0.437)	(0.061)	Low
	na	(0.003)	(0.000)	(0.250)	(0.001)	(0.001)	(0.000)	(0.243)	(0.000)	(0.702)	(0.001)	(0.000)	(0.000)	(0.061)	(0.437)	Mid
		na	(0.000)	(0.895)	(0.000)	(0.195)	(0.000)	(0.908)	(0.000)	(0.329)	(0.000)	(0.000)	(0.001)	(0.002)	(0.024)	LMid
			na	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.007)	(0.000)	(0.000)	UMid
				na	(0.000)	(0.226)	(0.000)	(0.782)	(0.000)	(0.356)	(0.000)	(0.007)	(0.000)	(0.000)	(0.080)	English
					na	(0.000)	(0.226)	(0.782)	(0.000)	(0.356)	(0.007)	(0.000)	(0.080)	(0.000)	(0.000)	French
						na	(0.000)	(0.195)	(0.000)	(0.018)	(0.000)	(0.057)	(0.000)	(0.000)	(0.000)	Oil
							na	(0.000)	(0.226)	(0.018)	(0.000)	(0.057)	(0.000)	(0.000)	(0.000)	NOil
								na	(0.000)	(0.295)	(0.000)	(0.014)	(0.000)	(0.062)	(0.000)	Closed
									na	(0.000)	(0.295)	(0.014)	(0.000)	(0.062)	(0.000)	Open
										na	(0.000)	(0.018)	(0.000)	(0.011)	(0.303)	Conf
											na	(0.018)	(0.000)	(0.303)	(0.011)	NConf
												na	(0.001)	(0.000)	(0.000)	SSA
													na	(0.000)	(0.000)	NA
														na	(0.283)	Chrit
															na	Islam

Panel C: Unclear Terrorism

Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		
Low	Mid	LMid	UMid	English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
na	**(0.069)**	**(0.001)**	**(0.000)**	**(0.057)**	(0.519)	**(0.000)**	**(0.000)**	**(0.000)**	(0.495)	**(0.002)**	(0.496)	**(0.000)**	**(0.000)**	(0.567)	**(0.068)**	Low
	na	**(0.001)**	**(0.000)**	(0.519)	**(0.057)**	**(0.000)**	**(0.000)**	(0.497)	**(0.000)**	(0.496)	**(0.002)**	**(0.000)**	**(0.000)**	**(0.068)**	(0.567)	Mid
		na	**(0.047)**	**(0.025)**	**(0.000)**	(0.109)	**(0.000)**	(0.459)	**(0.000)**	(0.222)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.001)**	**(0.008)**	LMid
			na	**(0.000)**	**(0.000)**	(0.227)	**(0.000)**	**(0.005)**	**(0.000)**	**(0.004)**	**(0.000)**	**(0.000)**	(0.765)	**(0.000)**	**(0.000)**	UMid
				na	(0.368)	**(0.000)**	**(0.000)**	(0.140)	**(0.007)**	(0.131)	**(0.022)**	**(0.000)**	**(0.000)**	(0.117)	(0.882)	English
					na	**(0.000)**	**(0.000)**	**(0.007)**	(0.140)	**(0.022)**	(0.131)	**(0.000)**	**(0.000)**	(0.882)	(0.117)	French
						na	**(0.000)**	**(0.085)**	**(0.000)**	**(0.006)**	**(0.000)**	**(0.000)**	(0.134)	**(0.000)**	**(0.000)**	Oil
							na	**(0.000)**	**(0.085)**	**(0.000)**	**(0.006)**	(0.134)	**(0.000)**	**(0.000)**	**(0.000)**	NOil
								na	**(0.002)**	(0.874)	**(0.000)**	**(0.000)**	**(0.003)**	(0.250)	**(0.000)**	Closed
									na	**(0.000)**	(0.874)	**(0.003)**	**(0.000)**	(0.250)	**(0.000)**	Open
										na	**(0.005)**	**(0.000)**	**(0.002)**	**(0.007)**	(0.252)	Conf
											na	**(0.002)**	**(0.007)**	(0.252)	**(0.007)**	NConf
												na	**(0.000)**	**(0.000)**	**(0.000)**	SSA
													na	**(0.000)**	**(0.000)**	NA
														na	(0.260)	Chrit
															na	Islam

Panel D: Total Terrorism

Income Levels				Legal Origins		Petroleum		Openness to sea		Stability		Regions		Religion		
Low	Mid	LMid	UMid	English	French	Oil	NOil	Closed	Open	Conf	NConf	SSA	NA	Chrit	Islam	
na	**(0.007)**	**(0.000)**	**(0.000)**	**(0.000)**	(0.736)	**(0.000)**	**(0.000)**	**(0.000)**	(0.139)	**(0.000)**	**(0.065)**	**(0.000)**	**(0.000)**	(0.811)	**(0.001)**	Low
	na	**(0.000)**	**(0.000)**	(0.736)	**(0.001)**	**(0.000)**	**(0.000)**	(0.139)	**(0.000)**	**(0.065)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.001)**	(0.811)	Mid
		na	**(0.001)**	**(0.032)**	**(0.000)**	(0.116)	**(0.000)**	(0.454)	**(0.000)**	(0.530)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.002)**	LMid
			na	**(0.000)**	**(0.000)**	**(0.013)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	(0.591)	**(0.000)**	**(0.000)**	UMid
				na	**(0.001)**	**(0.000)**	**(0.000)**	(0.157)	**(0.000)**	**(0.089)**	**(0.000)**	**(0.000)**	**(0.000)**	**(0.000)**	(0.620)	English
					na	**(0.000)**	**(0.000)**	**(0.000)**	(0.157)	**(0.000)**	**(0.089)**	**(0.000)**	**(0.000)**	(0.620)	**(0.000)**	French
						na	**(0.000)**	**(0.023)**	**(0.000)**	**(0.023)**	**(0.000)**	**(0.000)**	**(0.076)**	**(0.000)**	**(0.000)**	Oil
							na	**(0.000)**	**(0.046)**	**(0.000)**	**(0.023)**	**(0.076)**	**(0.000)**	**(0.000)**	**(0.000)**	NOil
								na	**(0.000)**	(0.814)	**(0.000)**	**(0.000)**	**(0.000)**	**(0.090)**	**(0.000)**	Closed
									na	**(0.000)**	(0.814)	**(0.000)**	**(0.001)**	**(0.090)**	**(0.000)**	Open
										na	**(0.000)**	**(0.000)**	**(0.001)**	**(0.034)**	**(0.000)**	Conf
											na	**(0.001)**	**(0.000)**	**(0.000)**	**(0.034)**	NConf
												na	**(0.000)**	**(0.000)**	**(0.000)**	SSA
													na	**(0.000)**	**(0.000)**	NA
														na	**(0.018)**	Chrit
															na	Islam

Low: Low Income countries. Mid: Middle Income countries. LMid: Lower Middle Income countries. UMid: Upper Middle Income countries. English: English Common law countries. French: French Civil law countries. Oil: Petroleum Exporting countries. NoOil: Non-petroleum Exporting countries. Closed: Landlocked countries. Open: Countries open to the sea. Conf: Conflict Affected countries. NoConf: Countries not Affected by Conflicts. SSA: Sub-Saharan Africa. NA: North Africa. Chrit: Christian dominated countries. Islam: Muslim dominated countries. Null Hypothesis: Difference in means =0. P-values in brackets. Bold values represent significant differences in means at the 1%, 5% and 10% significance levels.

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