



An Empirical Profile of Weak States in Sub-Saharan Africa

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Abstract

In this paper, we present an empirical construct to describe attributes of weak states in sub-Saharan Africa using the Minorities at Risk Database. Weak states are defined as having a prevalence of structural inequality, the components of which are economic differentiation, cultural (or social) inequality and political inequality. We used this construct to predict intercommunal conflict in two periods: between 1940 and 1989, and since 1990. Analysis showed that the structural inequality construct is reliable and that the likelihood of intercommunal conflict between 1940 and 1989 was associated with cultural differentials. Results also suggest that structural inequality, by itself, does not directly lead to intercommunal conflict. We argue that the addition of a variable that captures prevalence of small arms or light weapons will improve the predictive power of the model. Frequency distributions of the construct revealed that there is a high incidence of intercommunal conflict in the region and that three countries in particular were 'best performers'.

Résumé

Cette contribution présente une construction empirique, permettant de décrire les attributs des états faibles, en Afrique, à l'aide de la « Minorities at Risk Database » (Base de Données sur les Minorités Menacées). Les états faibles sont décrits comme des états souffrant d'inégalités structurelles, dont les composants sont la différenciation économique, l'inégalité culturelle (ou sociale), ainsi que l'inégalité politique. Nous nous sommes servis de cette construction, pour diviser les conflits inter communautaires en deux périodes : de 1940 à 1989, et à partir de 1990. Les analyses ont montré que la construction basée sur l'inégalité structurelle est crédible, et que la probabilité d'éclatement de conflits intercommunautaires entre 1940 et 1989 était liée aux différentiels culturels. Les résultats suggèrent également que l'inégalité structurelle, en soi, ne provoque pas directement de conflits intercommunautaires. Nous affirmons que l'addition

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d'une variable démontrant la prévalence du phénomène des armes légères permettra d'améliorer la justesse des prévisions de ce modèle. La distribution de fréquence de ce modèle a révélé qu'il existe une forte incidence de conflits intercommunautaires dans la région et que trois pays, en particulier constituaient « les champions en la matière ».

Weak states

One major factor that has been identified as inhibiting successful governance in sub-Saharan Africa is that the state is considered weak. Chazan et al (1999:66) described the characteristics of 'relative weakness of governments' as follows: 'scarcity of resources, politicized patterns of social differentiation, overexpanded state structures, insufficient state legitimacy, inadequate state power, and the lack of adaptation of alien institutions to local conditions'. The African state, it is argued, is characterised by a general inability to organise material and human resources, mobilise its citizens, and implement policies for general societal growth (see inter alia Englebert 1997; Ayoob 1995; Dia 1996; Migdal 1988; Tilly 1985).

Englebert (1997:767) has elaborated on the divergent political and social factors that shape the evolving state in Africa. He writes that the 'state in Africa is really a dubious contested community of heterogeneous and occasionally clashing linguistic, religious and ethnic identities that fails the test of legitimacy, and territoriality'. In the immediate post-colonial era, the process of political development involved the values of liberal political institutions borrowed from Europe, but sometimes diluted by values of militancy borrowed from Marxist-Leninist ideology (review for instance Kwame Nkrumah's legacy in Ghana, Nyerere in Tanzania, Toure in Guinea). In other countries, political development took the form of totalitarianism (for example, Côte d'Ivoire, Togo). The development of the new nation-states with borders that were foisted on them by the colonial countries was also affected by inter-ethnic competition or tension and divergent ethnic interests (review, for instance the civil war in Nigeria, Angola, Sudan) (Ki-Zerbo et al 1993). The high incidence of military coups has also undermined the political development and organisation of the state (see for instance Elaigwu and Mazrui 1993). According to Chabal and Daloz (1999), the state in Africa is used by African elites as an instrument of 'primitive accumulation'. Steeped in patrimonialism, some rulers, according to Chabal and Daloz, allocate resources to clients based on patronage (see also Ekeh 1998).

Babu (1996:90) writes that Africans inherited economic weakness from the 'primitive structure of colonial economy'. The theme of colonial (and

post-colonial) economic dependence has also been articulated by Nkrumah (1965,1973). The economic dependence of Africa, essentially the former colonies, on the West, particularly, Europe, was stark in the post-colonial era. Coquery-Vidrovitch (1993:301), writes that after independence, the new African states 'had to contend with disjointed structures of underdeveloped economies inherited on colonial lines, with production geared for export and a very limited domestic market'. Owusu (1993) argues that there was an 'export bias' in African agriculture policy due to the colonial pattern of trade, because the former colonial powers were still important trade partners with the former colonies. A consequence of this bias is that Western Europe accounts for nearly two-thirds of Africa's total trade. Kipre (1993:371) suggests that 'the post-colonial era in Africa started out with a major handicap: people had become accustomed to consuming (imported) manufactured goods, while the African economy was still largely in the pre-industrial age'.

In 1980, the situation had changed little and generally, the few industries in Africa were vulnerable to trans-national corporations with world-wide interests. Africa remains the least industrialised continent and is mainly a supplier of industrial raw materials to the industrialised countries of Europe and America. According to Meier and Rauch (2000:65) Africa's current economic status is characterised by: (1) low levels of education and income, (2) the absence of indigenous entrepreneurial class, (3) a heavy dependence on primary product exports induced by the colonial approach to development, and the 'consequently under-developed condition, distorted nature of infrastructure oriented towards trade with Europe, rather than internal development', (4) the small size of domestic market, and (5) poorly operating market mechanisms.

In sub-Saharan Africa, several states (and regions) are also grappling with armed conflicts in addition to state 'weakness'. In the past 10 years, Africa has experienced more armed conflicts than any other continent (for instance, wars in Rwanda, Liberia, Mozambique, Somalia, Sudan, Angola, Burundi and the two Congos), and the West Africa region has become volatile due to past and current conflicts in Sierra Leone, Liberia, Guinea, Côte d'Ivoire and Guinea Bissau. These conflicts also directly involved the armies of Nigeria, Ghana, Benin, The Gambia, Mali and Niger in the role of peace-keeping.

Gamba (1998), Lumpe et al (2000), and Boutwell and Klare (2000) among others have argued that these armed conflicts are due to the massive quantity of illegal light weapons and small arms circulating throughout the region and moving unchecked across porous borders (see also

Small Arms Survey 2001). During the Cold War, arms transfers were made from government to government under the patronage of the super powers. After the Cold War and since the 1980s, arms are transferred from government to self-styled insurgents and guerilla movements facilitated by globalisation and stockpiles of arms left over from the Cold War. The ready availability of these weapons is also due to the fact that they are inexpensive, portable, easy to maintain, conceal and use (Klare 1999). Cohen and Deng (1998) estimate that 10 million persons have been internally displaced in Africa due to these armed conflicts. It is argued that the ready availability of these weapons encourages warfare as a means to conflict resolution and extends the duration of wars.

These arguments about 'weak states' or structural incoherence (political, cultural or economic) in Africa are necessarily grounded in a post-colonial framework. Structure or structural properties as used in this paper describe rules and resources that facilitate or transform relations among people or institutions. In this rendition, 'weakness' is not related to external military threats, but rather specific intra-state existential experiences in a post-colonial era.

In this paper, we argue that state weakness can be described or captured by measuring structural inequalities within the state. We argue that structural inequality is based on political, cultural and economic differentiation or inequality within states. In other words, political incoherence, ethnic stratification, and the unequal distribution of wealth are the core dimensions of structural differentiation in sub-Saharan Africa. The proliferation of small arms and light weapons exacerbates the structural inequalities of these societies. The influx of light weapons or small arms may be seen as an opportunistic social disorder facilitated by domestic structural vulnerabilities and contradictions. (In fact, the proliferation of these weapons may be seen as undermining the state's claim to the monopoly of instrument of coercion or violence).

In general, the discourse on states is informed by the Weberian ideal type, which is profiled as possessing a monopoly of violence and deriving its authority from the consent of the governed. However, the temptation to compare the experience of sub-Saharan states (Third World countries, for that matter) to Europe (or the developing world, for that matter), is discouraged by Tilly (1985:169) as he correctly argues that 'in no simple sense can we read the future of Third World countries from the past of European countries... It will therefore help us to eliminate faulty implicit comparisons between today's Third World and yesterday's Europe'.

Based on the foregoing argument, we pose the following question: how is state 'weakness' or structural inequality related to communal conflict within these countries? In other words, does the incidence of armed conflict coincide with the prevalence of weak characteristics in African countries?

Structural inequality

In this paper, we draw on three common core concepts to empirically characterize weak states in Africa. We argue that these concepts describe structural inequality or social conflict within states, and include cultural stratification (e.g. Chazan et al 1999; Englebort 1997), political inequality (e.g. Englebort 1997, 2000; Chabal and Daloz 1999; Ekeh 1998; Ayooob 1995) and economic inequality (Kipre 1993; Owusu 1993; Babu 1990). In a neo-conflict perspective the African state is confronted with social conflict based not only on economic differentiation, but divergent ethnic interests and incoherent systems and structures of governance. From the Weberian perspective, the authority of the post-colonial state in Africa is contested. As such, the social contract between state and the governed is non-existent. Chazan et al (1999:239) describe the travails of these countries aptly: 'African countries, regardless of regime type or ideology, have confronted three general challenges of economic development in the post-colonial era: poverty, structural transformation, and dependence'.

We derive an empirical construct defined as structural inequality or 'weakness', that measures the extent of political, economic and cultural (social) differentiation using the Minorities at Risk data-set. This construct does not measure global exogenous factors such as global markets, or stockpiles of licit or illicit small arms or light weapons. Indeed, data on illicit arms trade would inform our investigation; however, our searches did not uncover reliable data on the illicit trade in Africa. The Small Arms Survey publishes estimates of the global trade, but in general such data are extremely difficult to garner, especially because national monitoring systems are inadequate in tracking illicit gun brokers, transport agents or 'gun-runners' (see Wood and Peleman 1999; Small Arms Survey 2001).

Our research questions are: (1) What is the relationship of the structural inequality construct (or state weakness) to violent communal conflict within the country? (2) How do the core structural inequality variables covary or how are they related with one another (what is the internal consistency of the structural inequality construct)? (3) What is the extent of political, economic and cultural inequalities in sub-Saharan Africa based on this construct?

An example of a similar construct is the United Nation's Human Development Index (HDI). The HDI is a composite index based on health and socioeconomic indicators: longevity, as measured by life expectancy at birth; educational attainment, as measured by a combination of adult literacy and combined gross primary, secondary and tertiary enrollment; and standard of living as measured by GDP per capita. This index captures the distorted economic structures that may covary with poverty and social conflict. (The index classifies most of African countries as having low human development and a few countries having medium human development (see Human Development Report 2000).

The data

Data are drawn from the Minorities At Risk database (MAR), which is maintained by the Center for International Development and Conflict Management at the University of Maryland and supported by the National Science Foundation, the United States Institute for Peace, the Hewlett Foundation, the Carnegie Corporation and the State Failure Task Force. Beginning in 1986, the MAR has collected and coded information on conflicts relating to minority groups in all countries with a current population of 500,000. A minority group at risk is defined as an ethnopolitical group that collectively suffers or benefits from systematic discriminatory treatment vis-à-vis other groups in a society; and/or collectively mobilises in defense or promotion of its self-defined interests (MAR codebook 2002). According to the MAR (see MAR website, www.mar.org), such groups might be ethnonationalist (people with a history of organised political autonomy), religious (communal groups holding different religious beliefs), cultural (tribes or ethnic groups with distinct cultural beliefs or practices), indigenous (descendants of conquered inhabitants who conform with the dominant culture), and ethnoclass (ethnically or culturally distinct peoples whose social and economic status in the main is different from the dominant group).

Other than gender inequality, these characterisations of groups or community identity capture the core features upon which social stratification or social inequality might be based (see for instance Hurst 1992). As such, this database provides important information about the nature of social inequality or equality of opportunity in 116 countries. The key advantage of this database is that it provides, for the first time, frequency counts based on nominal scaled qualitative data on political, economic and cultural inequality (or structural inequality) vis-à-vis groups within countries. Most important, the MAR provides such data that depict systematic

unequal treatment related to communal identities that may be based on language or culture, ethnicity or race, religion, or territory. The construct of structural inequality as a manifestation of state weakness proposed in this paper is consonant with the nature of the MAR database.

Depending on the number of minority groups our analyses are based on 32 sub-Saharan African countries for which there is information, a country may have more than one record in the data-set. Data are mainly categorical of the ordinal nature and include both 'static' and 'dynamic' variables. Static variables are data that remain relatively the same over long periods (such as name), and dynamic variables are those that are subject to change (such as regime type). Indeed 'static' variables may be aptly classified as constants. The database contains five types of variables: (a) group characteristics and status, (b) group discrimination, (c) group organisation, (d) group collective interests, and (e) group conflict behaviour.

Methods

Ten variables were originally selected to depict the construct. Regime type (RT), economic differentials index (EDI), economic discrimination index (EDCI), political differentials index (PDI), equal protection (EP), right to organise (RO), cultural differentials index (CDI), and different language (DF) were originally selected to be predictor or explanatory variables. Intercommunal conflict 1940-1989 (IC1), and intercommunal conflict since 1990 (IC2) were selected to be the outcome variables. All the predictor or explanatory variables were recoded for our analysis.¹

In addition to regime type, we used three variables, namely political differentials index,² equal protection, and the right to organise, to depict political inequality. Two variables cover the area of economic inequality, namely economic differentials index and economic discrimination index. These variables represent inequality in income, wealth, land property and education.³ Two variables represent the concept of cultural inequality, namely cultural differentials index and different language. These variables represent inequality based on ethnicity or nationality, language, historical origin, religion, social customs, and territory.⁴

We used two variables to represent intercommunal conflict. These two intercommunal conflict variables come closest to our original idea of significant violent ethnic conflict within the country. Specifically, the codebook describes these conflict variables as follows: 'these variables provide information on open hostilities between the minority group and other communal groups, which includes open conflicts with other mi-

norities and the majority or dominant group, but not conflicts with the state, or with dominant groups exercising state power. The minority being coded often is the target of attacks, but in some instances may initiate them. The actual initiation of violence is difficult to determine' (MAR codebook 2002:83).

We hypothesized that all countries in sub-Saharan Africa have some level of inequality in all three domains (political, economic and cultural) and that these inequalities are related to intercommunal conflict. We also hypothesised that these variables represent a reliable construct of the dimensions of weak states in Africa.

We conducted three kinds of analysis based on the research questions posed: correlation analysis provides the extent to which these variables are related to one another; reliability analysis provides a measure of the internal consistency of the construct; and logistic regression assesses which elements of the construct tend to coincide with the presence of intercommunal conflict. Finally, frequency counts provide the extent to which there are political, economic and cultural inequalities in Africa.⁵

Findings

Table 1 presents the correlation matrix of all the selected original variables. This matrix is a first step in determining the systematic association among the variables of interest. We judged highly correlated variables to have coefficients in the range of 1.0 to 0.7 and moderately correlated variables to have coefficients in the range of 0.6 to 0.4. Coefficients that are less than 0.3 depict variables that have low correlation. It is important to note that the correlation coefficient does not imply causality. In selecting variables for inclusion in subsequent procedures, we were interested in predictor or explanatory variables that are moderately correlated, but are highly correlated with the outcome variables. Highly correlated predictor or explanatory variables create collinearity problems in general linear models because it is difficult to study the separate effects of the predictors on the outcomes.

Notably, the correlation coefficient between political differential index and economic differential index is moderately acceptable at 0.51, and so is the correlation coefficient between cultural differential index and economic differential index, 0.48. Right to organise and equal protection are highly correlated with the political differential index (0.77 and 0.69 respectively). The economic discrimination variable has a moderate correlation with the economic differential index, (0.38), but has low correlations with other variables in the matrix. The different language

Table 1: Correlation matrix of indicators

	Regime Type	Economic Differential	Economic Discrimination	Political Differential	Right to Organise	Equal Protection	Conflict 1940-1989	Conflict Since 1990	Cultural Differential
Economic Differential									
Economic Discrimination	.14								
Political Differential	.14	.51							
Right to Organise	.07	.32	.10		.77				
Equal Protection	.21	.32	.27	.69	.54				
Conflict 1940-1989	.16	-.09	.03	-.04	-.07	-.06			
Conflict 1990	.10	.03	.28	.01	.03	.04	.19		
Cultural Differential	-.27	.48	.25	.21	-.02	.06	-.04	.02	
Different Language	-.15	.06	-.06	-.00	-.04	-.10	-.07	-.19	.29

variable also has low correlation coefficients with the cultural differential index and other variables in the matrix. The matrix reveals that except for political differential index, economic differential index, cultural differential index, which among them demonstrate moderate correlation, the rest of the predictor variables demonstrate either high or low correlation. The economic discrimination index has a moderate correlation with the economic differential index, but does not show promise when correlated with the political differential index or the cultural differential index. It is also noteworthy that none of the variables is moderately or highly correlated with the outcome variables, intercommunal conflict between 1940–1989 and since 1990. This is an indication that the relationship between the construct and the posited outcomes may be weak.

Table 2 presents the results of the reliability analysis. The analysis yields information about the internal consistency or the average inter-item correlation of the construct based on the three variables selected above from the correlation matrix. A high alpha coefficient means that the variables or items are positively correlated and that they are measuring a common phenomenon.

Table 2: Reliability coefficients

	Alpha If Item Deleted
Economic Differentials	0.3482
Cultural Differentials	0.6717
Political Differentials	0.5774
Cronbach's alpha for 3 items	0.6635
Standardised item alpha	0.6721

The alpha provides a single summary measure of internal consistency, which in this analysis is a respectable 0.66; the standardised alpha is a simplified version of the alpha, which assumes that item variances are equal. Table 2 also presents the relative strength of the indexical variables in the construct. Of the three, economic differential contributes the most to the alpha; when this variable is deleted from the construct, the internal consistency of the measure declines to 0.34. These results leave us confident that the structural inequality construct made up of three index variables is robust and reliable.

Table 3 presents the results of logistic regression procedure. The logistic regression model was developed by recoding the three predictor variables into dichotomous variables.⁶

Table 3: Logistic regression model

	Intercommunal 1940–1989	Conflict Since 1990
R^2	0.008	0.002
Independent Variables	Odds Ratios	
Economic Differentials vs. not	1.01	0.95
Political Differentials vs. not	0.85	1.15
Cultural Differentials vs. not	1.38*	1.11

*Significant at $p < .01$

Logistic regression produces odds ratio estimates for each predictor. These estimates are probabilities that are easily interpretable. Each estimate indicates how much more likely it is that an outcome would be observed if, all things being equal, the predictor occurs compared to when the predictor does not occur. The model we built in this paper estimates how much more (or less) likely intercommunal conflict will occur given political, economic and cultural inequality. An odds ratio above 1.0 means that intercommunal conflict becomes more likely, and a ratio below 1.0 means that it becomes less likely. Ratios that are statistically significant are identified with an asterisk.

Table 3 shows that countries that had cultural differentials were almost one and half times more likely to experience intercommunal conflict between 1940–1989; none of the predictors in the construct significantly increased or decreased the likelihood of observing intercommunal conflict since 1990. The R^2 yielded by the model is very low and clearly suggests that the model can be improved. The significant odds ratio estimate suggests that prior to 1990, ethnic differences increased the likelihood of intercommunal conflict.

Table 4 presents frequency distributions of modal scores for all countries in the sub-Saharan region. We used modal scores because all countries had multiple records. This table shows the prevalence of structural

inequality in the region. Most of the countries in the region are coded as having some kind of political (81 percent, 26) or economic (66 percent, 21) inequality. All countries are coded as having cultural differentials. Between 1940 and 1989, a little over half (53 percent, 17) of the countries are coded as having intercommunal conflict, whereas 75 percent (24) were coded as having intercommunal conflict since 1990. Three countries emerge as 'best performers' based on these modal scores; Zambia, Tanzania and Ghana. Of the five indicators, Zambia had no intercommunal conflicts and no significant political or economic differentials. Tanzania had no intercommunal conflicts and no significant political differentials. Ghana had no intercommunal conflicts and no significant economic differentials.

Discussion and conclusion

The results of the analysis support the argument that the construct of structural inequality comprising political, cultural and economic differentiation variables is reliable and robust. There is positive inter-item correlation among these variables and the reliability coefficient is acceptable. However, all the original explanatory variables selected for this study were not useful because they were not moderately correlated with the other core variables in the construct. Analysis also revealed that of the three variables, economic differentiation was the most powerful. This is an important finding, suggesting that governments in Africa can significantly reduce overall structural contradictions or inequalities in their countries by reducing economic inequality. This is not to say that political inequalities (i.e. the right to organise, guarantees of equal protection, access to power, access to civil service, recruitment, and voting rights) are not important, or that discrimination based on ethnicity or nationality, language, religion, or territory is not important. Rather, the finding suggests that a reduction in economic inequalities mitigates the effects of political and cultural differentiation.

The logistic regression model showed that the odds of having intercommunal conflict from 1940 to 1989 increased when there were cultural differentials. This is an important finding because it supports the historical reality of the time and confirms the significance of cultural difference in the immediate postcolonial milieu. The development of new nation-states with borders that were foisted on them by the colonial countries immediately after independence was affected by inter-ethnic competition or tension. In Nigeria, for instance, cultural differentials led to a brutal civil war. The struggle for political maturity and the general search

Table 4: Modal scores on selected variables

Country	Political Differen- tials Index	Economic Differen- tials Index	Cultural Differen- tials Index	Intercom- munal Conflict 1940-1989	Intercom- munal Conflict since 1990
Angola	Substantial (2)	Major (3)	Slight (1)	Yes (1)	Yes (1)
Botswana	Slight (1)	Major (3)	Major (3)	No (0)	Yes (1)
Burundi	Slight (1)*	Slight (1)*	Substantial (2)*	Yes (1)	Yes (1)
Cameroon	Slight (1)	Slight (1)*	Substantial (2)*	No (0)	Yes (1)
Chad	Major (3)*	Not sig (0)	Major (3)	Yes (1)*	Yes (1)*
Côte d'Ivoire	Major (3)	Substantial (2)	Extreme (4)	No (1)	Yes (1)**
Dem. Rep. Congo	Substantial (2)*	Not sig (0)	Slight (1)	Yes (1)*	Yes (1)*
Djibouti	Extreme (4)	Extreme (4)	Major (3)	Yes (1)	Yes (1)
Eritrea	Slight (1)	Major (3)	Extreme (4)	No (0)	No (0)
Ethiopia	Substantial (2)*	Extreme (4)	Extreme (4)	No (0)	Yes (1)
Ghana	Slight (1)*	Not sig (0)	Slight (1)	No (0)	No (0)
Guinea	Substantial (2)	Not sig (0)	Slight (1)	Yes (1)	No (0)
Kenya	Slight (1)	Major (3)	Substantial (2)*	Yes (1)	Yes (1)
Liberia	Substantial (2)	Substantial (2)	Major (3)	No (0)	Yes (1)**
Madagascar	Substantial (2)	Not sig (0)	Substantial (2)	Yes (1)	Yes (1)

Mali	Not sig (0)*	Slight (1)*	Major (3)	No (0)	Yes (1)
Mauritania	Major (3)*	Major (3)	Major (3)	Yes (1)	Yes (1)
Namibia	Slight (1)*	Slight (1)*	Major (3)	No (0)	Yes (1)
Niger	Substantial (2)	Slight (1)*	Slight (1)	No (0)	No (0)
Rep. of Congo	Not sig (0)*	Not sig (0)*	Slight (1)	Yes (1)	Yes (1)
Nigeria	Major (3)	Extreme (4)	Substantial (2)	Yes (1)	Yes (1)
Rwanda	Major (3)*	Not sig (0)*	Slight (1)	Yes (1)	Yes (1)
Senegal	Slight (1)	Substantial (2)	Substantial (2)	No (0)	No (0)
Sierra Leone	Slight (1)*	Not sig (0)	Slight (1)	Yes (1)	Yes (1)
Somalia	Substantial (2)	Not sig (0)	Slight (1)	No (0)	Yes (1)
South Africa	Not sig (0)	Extreme (4)	Extreme (4)	Yes (1)	Yes (1)
Sudan	Substantial (2)*	Major (3)	Extreme (4)	Yes (1)	Yes (1)
Tanzania	Not sig (0)	Slight (1)	Substantial (2)	No (0)	No (0)
Togo	Not sig (0)*	Slight (1)	Slight (1)	Yes (1)	Yes (1)
Uganda	Substantial (2)	Substantial (2)	Substantial (2)	No (0)	No (0)
Zambia	Not sig (0)	Not sig (0)	Substantial (2)	No (0)	No (0)
Zimbabwe	Slight (1)*	Not sig (0)	Substantial (2)	Yes (1)	Yes (1)

* Where multiple modal values exist, the mean value is reported.

**Data coding revised by authors based on current information.

for coherence in systems and structures of governance, was a painful one and it still is. Young (1994:75) writes that 'the political structuration of ethnic units for colonial local administration, particularly within the (British) indirect rule doctrine, embedded ethnic identity within an institutional frame, especially in historically centralized African states'. After independence, ethnonationalism collided with economic dependence (on Europe) and incoherent political systems. Indeed, in some of these sub-Saharan African states, national integration is not completed and the state-building project is a work in progress.

However, the overall construct did not perform well in predicting intercommunal conflict. This suggests that there are other variables that can improve the model. This is another important finding, which suggests that structural inequality by itself does not lead to violent intercommunal conflict. The results also clearly indicate the prevalence of intercommunal conflict since 1990. The prevalence of intercommunal conflict (75 percent) in sub-Saharan Africa and the inadequacy of the construct in predicting it clearly indicates that there are other key variables that covary with intercommunal conflict and that structural inequality by itself does not directly lead to violent inter-ethnic conflict. We postulate that the illicit trade in small arms is an important catalyst for the initiation of wars and violent intercommunal conflict and that such a variable may enhance the power of the construct in predicting intercommunal conflict.

Acknowledgement

We would like to thank the two anonymous reviewers for their helpful comments on earlier drafts of this paper.

Notes

1. Of the ten original variables, equal protection and right to organise are three level ordinal variables (0-2), with 0 coded as no differential, 1 coded as some differential and 2 coded as significant differential. Regime type is a four level ordinal variable with 1 coded as old democracy, 2 coded as new democracy, 3 coded as transitional polity, 4 coded as autocracy. Political differentials index, economic differentials index and cultural differentials index are seven level ordinal variables (-2 to +4). For our analyses, these variables were recoded as follows: -2, -1, & 0 = no significant differential, 1 = slight differential, 2 = substantial differential, 3 = major differential, 4 = extreme differential. The economic discrimination index is coded differently: 0 = no discrimination, 1 = historical neglect/no remedy, 2 = historical neglect/remedial policies, 3 = social exclusion, 4 = restrictive policies. Intercommunal conflict 1940-1989 and intercommunal conflict since 1990 are dichotomous variables (0 = no; 1

= yes). For all three domains, we selected one indexical or composite variable to represent the core concept. Other variables were selected based on a review of the component variables.

2. The political differentials index variable is a composite index of six political dimensions, which include right to organise, guarantee of equal protection, access to power, access to civil service, recruitment, and voting rights.
3. The economic differential index is a composite index of six dimensions including income, land property, higher education, presence in commerce, presence in professions, and presence in official positions. The economic discrimination index represents public and social policy relating to economic inequalities.
4. The cultural differentials index is a composite index of six dimensions including different ethnicity or nationality, different language, different historical origin, different religion, different social customs, and different residence. Different language is used as an additional indicator of ethnic presence.
5. Correlation analysis describes the extent to which variables covary. This analysis yields the correlation coefficient r , which is a summary measure of the linear relationship between paired values. Reliability analysis yields Cronbach's alpha, which is a measure of internal consistency of the construct. Logistic regression is a useful tool to model data, however no claim is made for direct causal relationships. Logistic regression is often used when the dependent variable is composed of two values (in this analysis, the presence or absence of intercommunal conflict). The analysis yields odds ratios which indicate how much more likely an outcome would be observed if, all things being equal, the predictor occurs compared to when the predictor does not occur. Logistic regression also yields the R^2 coefficient or strength of association between the dependent and independent variables. We used SPSS for Windows version 11.0 for all analysis except the logistic regression procedures, for which we used SAS for Windows version 8.0.
6. The logistic model may be illustrated by the following equation (based on the general linear equation):

$$\text{Logit}(C2) = b0 + b1 * V1 + b2 * V2 + b3 * V3$$

Where $C2$ denotes an outcome of intercommunal conflict or whether or not there was intercommunal conflict within a period. When $C2 = 0$ then there was no intercommunal conflict, when $C2 = 1$, then there was intercommunal conflict. The variable $V1$ represents one of the predictor variables, where $V1 = 0$ represents nonexistence of a type of inequality and $V1 = 1$ represents the presence of inequality, and the $V2$ and $V3$ represent the other predictor variables.

References

- Ayoob, M., 1995, *The Third World Security Predicament: State Making, Regional Conflict and the International System*, Boulder, Colorado, Lynne Rienner.
- Babu, A.M. 1996. 'The New World Disorder - Which Way Africa?', in *Pan-Africanism: Politics, Economy and Social Change in the Twenty-first Century*, edited by Tajudeen Abdul-Raheem, New York, New York University Press.
- Boutwell, J. and Klare, M., 2000, 'Waging A New Kind of War: A Scourge of Small Arms', *Scientific American* June.
- Chabal P. and Daloz, Jean-Pascal, 2001, *Africa Works: Disorder as Political Instrument*, International Africa Institute, James Currey & Indiana University Press.
- Chazan, N., Lewis, P., Mortimer, R.A., Rothchild, D., Stedman, S.J., 1999, *Politics and Society in Contemporary Africa*, 3rd ed., Boulder, Colorado, Lynne Rienner.
- Cohen R. and Deng, F., 1998, 'Exodus within Borders: The Uprooted Who Never Left Home', *Foreign Affairs*, July/August.
- Coquery-Vidrovitch, C., 1993, 'Economic Changes in Africa in the World Context', in *General History of Africa: Africa Since 1935*, Mazrui, Ali A., ed., UNESCO, California, Heinemann.
- Dia, M., 1996, *Africa's Management in the 1990s and Beyond: Reconciling Indigenous and Transplanted Institutions*, Washington, World Bank.
- Ekeh, P., 1998, 'Colonialism and the Two Publics in Africa: A Theoretical Statement', in Lewis, Peter ed., *Africa: Dilemmas of Development and Change*, Boulder, Colorado, West View Press.
- Elaigwu, J. I., and Mazrui, Ali A., 1993, 'Nation-building and Changing Political Structures', in *General History of Africa: Africa Since 1935*, edited by Ali A. Mazrui, UNESCO, California, Heinemann.
- Englebert, P., 1997, 'The Contemporary African State: Neither African nor State', *Third World Quarterly*, Vol. 18, No 4, pp 767-775.
- Gamba, V. 1998. 'Small Arms Foster Social Turmoil: Illegal trafficking Disrupts African Communities, Spreads Crime', New York, United Nations.
- Hurst, C. E. 1992. *Social Inequality: Forms, Causes and Consequences*, Boston, Allyn and Bacon.
- Kipre, P., 1993, 'Industrial Development and Urban Growth 1935-80', in *General History of Africa: Africa Since 1935*, edited by Ali A. Mazrui, UNESCO, California, Heinemann.
- Ki-Zerbo, J., Mazrui, Ali A., Wondji, C., and Boahen, A.A., 1993, 'Nation-building and Changing Political Values', in *General History of Africa: Africa Since 1935*, edited by Ali A. Mazrui, UNESCO, California, Heinemann.
- Lumpe, L., 2000, *Running Guns: The Global Black Market in Small Arms*, New York, Zed Books.

- Human Development Report 2000*, United Nations Development Programme, New York, Oxford University Press.
- Migdal, J.S., 1988, *Strong Societies and Weak States*, Princeton, Princeton University Press.
- Minorities at Risk Dataset Users Manual, 2002, University of Maryland Center for International Development and Conflict Management, College Park.
- Nkrumah, K., 1965, *Neo-Colonialism: The Last Stage of Imperialism*, London, Panaf Books.
- Nkrumah, K., 1973, *The Struggle Continues*, London, Panaf Books.
- Owusu, M., 1993, 'Agriculture and Rural Development Since 1935', in *General History of Africa: Africa Since 1935*, edited by Ali A. Mazrui, UNESCO, California, Heinemann.
- Small Arms Survey 2001: Profiling the problem*, Graduate Institute of International Studies, Geneva.
- Tilly, C., 1985, 'War Making and State Making as Organized Crime', in Peter Evans, Dietrich Rueschemeyer & Theda Skocpol eds., *Bringing the State Back In*, United Kingdom, Cambridge University Press.
- Young, C., 1994, 'Evolving Modes of Consciousness and Ideology: Nationalism and Ethnicity', in *Political Development and the New Realism in Sub-saharan Africa*. Apter D. and C. G. Rosberg eds., Charlottesville, University of Virginia Press.
- United Nations, 1997, 'Report of the Panel of Government Experts on Small Arms', United Nations, New York.
- Wood, B. and J. Peleman, 1999, *The Arms Fixers: Controlling the Brokers and Shipping Agents*, Oslo, PRIO.