# ELECTORAL LAWS UNDER EXTREME CONDITIONS: THE CASE OF AFRICA

David Backer
Department of Political Science
University of Michigan
Ann Arbor, MI 48104
(734) 764-6313
(734) 764-3522 [fax]
dabacker@umich.edu

Ken Kollman
Department of Political Science
University of Michigan
Ann Arbor, MI 48104
(734) 764-6313
(734) 764-3522 [fax]
kkollman@umich.edu

Presented at the Annual Meeting of the Midwest Political Science Association Chicago, IL April 3, 2003. We thank especially the National Science Foundation for generous funding, and we welcome comments on this first draft.

## ELECTORAL LAWS UNDER EXTREME CONDITIONS: THE CASE OF AFRICA

#### **ABSTRACT**

Analyses of the effects of electoral systems on party competition mainly focus on countries or eras where contextual effects are not pronounced or remain essentially constant, and avoid settings where conditions are not conducive to political party formation, candidates and organizations are stifled, and elections are mired in boycotts and violence. We depart from the norm by examining elections in Sub-Saharan Africa, which occur in environments that regularly qualify as extreme, in search of generalizations that shed light on the robustness of existing empirical results. Our analysis relies on a new archive we compiled of returns from more than 3,600 district-level contests across 60 elections in 26 countries. These data suggest that district magnitude has a modest but significant effect on the effective number of political parties at the district level in Sub-Saharan Africa. The modal tendencies of the single-member district contests are consistent with Duverger's Law, though there is considerable variation both within and across countries. At the same time, the distribution of party system outcomes across these contests is not radically different from those observed in established democracies. In fact, the cases from Sub-Saharan Africa parallel both the U.S. (sizeable share of non-competitive contests) and India (significant fragmentation).

## 1 INTRODUCTION

There is a vast literature on how electoral laws, especially the rules for awarding seats in legislatures and for choosing executives, systematically shape the nature of competition for elected public offices. Scholars have used a variety of data to demonstrate correlations between specific electoral rules—such as whether countries employ a single-member district and plurality system, or instead utilize proportional representation—and the effective number of parties competing at the local or national level.¹ Among the consistent findings from cross-national, multivariate studies is that smaller district magnitudes (i.e., the number of legislative seats awarded to the typical district) tend to result in fewer candidates and/or parties receiving substantial votes relative to larger district magnitudes (Lijphart 1994, Taagepera & Shugart 1989).

Of course, various contextual factors affect this relationship, and many empirical studies control for differences across countries or across eras within countries when examining the marginal effect of electoral rules on the number of parties or candidates. For instance, interactions between social cleavages—ethnic, religious, linguistic, regional, etc.—and district magnitude tend to drive the number of parties competing for seats in a country (Ordeshook & Shvetsova 1994, Chhibber & Torcal 1997, Amorim & Cox 1997). Recent research has linked fluctuations in the number of parties in single-member district countries to variation in fiscal federalism (Chhibber & Kollman 1998, 2003). Another consideration is the timing of legislative elections, including the stage at which they take place during a transitional process (Reich 2001) as well as the synchronization with presidential elections (Shugart & Carey 1992). Economic conditions also appear to have some impact (Coppedge 1997). Thus, electoral rules alone cannot explain the number of parties or other features of interest in party systems. Instead, the latest studies demonstrate that while electoral rules matter, especially at the district level but also at the national level, a number of identifiable contextual factors also shape electoral competition.

By contrast, formal models of electoral system effects—particularly those evaluating Duverger's proposals about the effects of plurality voting rules on elections and voting—typically omit or abstract away contextual factors such as the diversity of preferences among the electorate or the complicated ways voters may understand the local or national situations confronting elected officials (Riker 1976, 1982, King & Janda 1985, Palfrey 1989, Fedderson 1992, Taagepera & Shugart 1993, Fey 1997). In fact, the most prominent theoretical treatments of electoral system effects on party competition actually seek to isolate how voters and candidates respond to incentives engendered by the rules of the game within single election environments. For example, Cox (1994, 1997) models how plurality election rules constrain the number of candidates or parties within an individual district. He assumes that both the candidates and the voters care strictly about the outcomes resulting from the ballots cast in that district. The only extra-election information of any consequence is the expected rank order of finish among the challenging candidates. Such an approach generally avoids the larger political contexts that might influence electoral competition.

When studying the institutional correlates or causes of the number of parties, the strength of major and minor parties, or the evolution of the party system, one either needs to control for contextual factors that might vary across countries, regions or districts, or else make them irrelevant by ensuring that they remain essentially constant across a set of cases. Consider the question of whether a country or region has experienced intersectional violence or war. The vast majority of studies of electoral systems examine advanced industrialized democracies (e.g., Rae 1967, Lijphart 1990, 1994), or countries in Latin America and elsewhere that can claim relatively long histories of elections and little recent exposure to territorial conflicts (e.g., Shugart 1985, Mainwaring & Scully 1995, Cox 1997).<sup>2</sup> Empirical researchers have, in effect, restricted their attention to those cases where this kind of contextual factor hardly varies or its effects appear not to be too pronounced, or alternatively where there are good measures of the contextual factors and sufficient cases to get some statistical leverage. For these reasons, countries where circumstances are not conducive to political party formation, where candidates are stifled, or where there are frequent boycotts, violence or other election-related disruptions are commonly avoided—perhaps justifiably so.

The point here is simply that the empirical regularities that researchers have identified in the study of electoral systems rely almost exclusively on data from certain kinds of contexts, namely those with traditions of free, democratic elections, rule of law, and protections for freedom of assembly and the formation of political parties. We adopt a different tack in this paper, examining electoral system effects in Sub-Saharan Africa, where such ideal conditions are the exception and extreme environments are the norm. The basic question is whether elections in this region conform to conventional patterns of political competition from elsewhere in the world. Our ultimate aim is to make some generalizations that shed light on the robustness—or conversely, the brittleness—of existing findings. If our data exhibits some of the same regularities in election outcomes that have been hypothesized and later validated in other countries and on other continents, then the argument that there are measurable electoral system effects is reinforced. In other words, electoral system effects may "cut through" contextual factors even in Sub-Saharan Africa, where those surrounding conditions would seem a priori to dominate electoral politics.

We focus on local outcomes—i.e., at the level of electoral districts, rather than at a national level. Studying the effect of electoral laws in terms of district-level results is a relatively recent development in the literature. One obvious constraint has been the availability of the data necessary to undertake comparative and historical analysis. Yet the more significant explanation is the long-standing confusion over the precise applicability of Duverger's Law and other related propositions (Cox 1997, Chhibber & Kollman 1998). A consensus has emerged that these theories are best understood as representations of the dynamics of individual contests, instead of as predictions of aggregate properties of elections, encompassing multiple contests (Gaines 1997). Some cross-national and time-series research has been undertaken on the impact of electoral systems on district-level outcomes in established democracies (e.g., Chhibber & Kollman 1998, 2003). These sorts of approaches remain uncommon, however, in the study of African elections, for reasons that are both universal in nature (availability of data) and particular to the region (limited cases of free and fair elections).

In the next section, we describe various aspects of the political and institutional context in Sub-Saharan Africa that have a bearing on elections in general and on the relationship between electoral systems and party systems in particular. Section 3 surveys the literature on African elections, to explain why and how the topic we address remains a missing part of the puzzle. Section 4 outlines our analytical framework and describes the unique data archive we compiled in order to undertake this research. In Section 5, we report the key insights from our analysis. First, district magnitude appears to have a modest but significant impact on the effective number of political parties at the district level, at least in our sample of cases. Second, the modal tendencies of single-member district elections in Sub-Saharan Africa are consistent with Duverger's Law, though there is considerable variation both within and across countries. Third, the distribution of effective number of political parties across these contests is not radically different from the distributions observed in Canada, India, the U.K. and the U.S. In fact, the two closest parallels to the cases from Sub-Saharan Africa are the U.S.—in terms of the sizeable frequency of non-competitive contests—and India—in terms of the extent of fragmentation of local party systems. We conclude in Section 6 with thoughts about the implications of these findings and future avenues of research.

#### 2 POLITICS AND ELECTORAL INSTITUTIONS IN SUB-SAHARAN AFRICA

At the outset, we wish to acknowledge that the countries of Sub-Saharan Africa are hardly identical in all respects: they exhibit relevant differences as far as their history, culture, politics, etc. Yet they arguably share more in common with each other than they do with the cases that feature in other research on electoral competition and party systems. The latter countries enjoy relatively open, safe and stable environments. In stark contrast, since achieving independence few of the countries in Sub-Saharan Africa have escaped political violence, whether in the form of state repression, rebel unrest, coups, revolution, civil strife and/or inter-state conflict. Formal and other constraints upon party formation, campaigning by candidates and voter activities have been commonplace—and extended spells of democracy, with free and fair elections and basic protections for civil and political rights the exception—throughout nearly all of the region (Table 1).

 $\begin{tabular}{ll} \textbf{TABLE 1} \\ \textbf{POLITICAL CONDITIONS IN SUB-SAHARAN AFRICA SINCE INDEPENDENCE} \end{tabular}$ 

Country	Year of Independence	Average Regulation of Participation	Average Competitiveness of Participation	Average Political Competition	Average Polity Score
Angola	1975	2.2	1.4	2.0	-5.1
Benin	1960	2.7	2.1	3.8	-2.5
Botswana	1966	4.0	4.0	9.0	8.7
Burkina Faso	1960	2.3	1.7	2.0	-5.1
Burundi	1962	2.3	1.4	2.0	-5.4
Cameroon	1960	2.2	1.6	2.2	-6.7
Central African Republic	1960	2.4	1.4	2.2	-4.4
Chad	1960	2.3	1.4	2.0	-5.8
Comoros	1975	2.6	1.8	3.3	-1.8
Congo (Brazzaville)	1960	2.2	1.5	2.1	-4.8
Congo (Kinshasa)	1960	2.0	1.1	1.1	-6.1
Diibouti	1977	2.3	1.5	1.9	-6.8
Equatorial Guinea	1968	2.1	1.3	1.4	-6.2
Eritrea	1993	2.0	2.0	2.0	-6.0
Ethiopia	4	2.1	1.3	1.7	-6.1
Gabon	1960	2.3	1.5	1.7	-7.3
Gambia	1965	1.9	4.1	8.1	5.1
Ghana	1960	2.4	1.8	3.0	-3.9
Guinea	1958	2.1	1.4	1.8	-7.2
Guinea-Bissau	1974	2.4	1.6	2.4	-4.2
Ivory Coast	1960	2.0	1.3	1.4	-7.9
Kenya	1963	2.3	1.7	2.3	-4.8
Lesotho	1966	2.6	2.1	3.3	-2.8
Liberia	4	2.1	2.0	2.3	-4.7
Madagascar	1960	2.8	2.5	4.2	-1.0
Malawi	1964	2.4	1.6	2.5	-5.9
Mali	1960	2.5	1.6	2.6	-3.9
Mauritania	1960	2.0	1.2	1.2	-6.6
Mauritius	1968	2.3	4.6	9.6	9.6
Mozambique	1975	2.5	1.9	3.3	-3.8
Namibia	1990	4.0	4.0	9.0	6.0
Niger	1960	2.3	1.2	1.9	-4.7
Nigeria	1960	2.6	1.7	3.0	-2.0
Rwanda	1961	2.3	1.6	2.6	-6.2
Senegal	1960	3.0	2.7	5.2	-3.0
Sierra Leone	1961	2.4	1.7	2.5	-3.3
Somalia	1960	2.9	0.7	1.9	-2.2
South Africa	5	4.0	4.0	9.0	9.0
Sudan	1954	2.3	1.5	2.4	-3.0
Swaziland	1968	2.1	1.5	1.9	-8.2
Tanzania	1961	2.2	1.3	1.5	-6.0
Togo	1960	2.2	1.6	2.2	-5.7
Uganda	1962	2.4	1.4	2.3	-3.1
Zambia	1964	2.7	2.0	3.7	-3.5
Zimbabwe	1970	2.4	2.1	2.8	-3.0
Average		2.4	1.9	3.1	-3.4

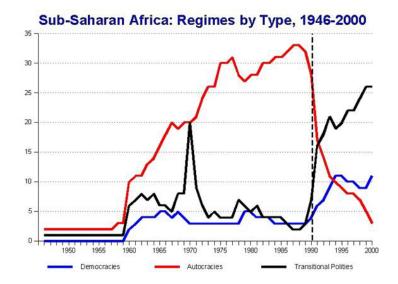
Notes: Regulation of participation: 1 (regulated) to 5 (unregulated).

Competitiveness of participation: 1 (repressed) to 5 (competitive).

Political competitiveness: 1 (repressed competition) to 10 (institutionalized open electoral competition).

Polity score: -10 (strongly autocratic) to 10 (strongly democratic).

FIGURE 16



In addition, autocratic polities—encompassing single-party, personalistic and military authoritarian regimes—were prevalent throughout the 1960s, 1970s and 1980s (Figure 1). Despite these circumstances, most countries in Sub-Saharan Africa opted to conduct regular parliamentary (and presidential) elections. A substantial number of these elections were essentially merely formal exercises, designed to confirm the appointment of elites to token legislative bodies, rather than to encourage any tangible measure of political competition. For example, H.K. Banda ruled Malawi as a one-party state for its first thirty years (1964-1994), yet still held parliamentary elections fairly consistently throughout that time frame—seven in all. Similarly, Tanzania, initially under the leadership of President Julius Nyerere (1964-1985), conducted one-party elections unfailingly every five years from 1965 through 1990.

TABLE 2
ELECTIONS IN SUB-SAHARAN AFRICA, BY ERA AND FORM OF COMPETITION<sup>7</sup>

Time Period	Multi-Party	One-Party	No Parties8
1950-1959	12	2	0
1960-1969	31	26	0
1970-1979	17	33	0
1980-1989	18	45	0
1990-1999	79	3	5
2000-2003	26	0	2
Total	183	109	7

Altogether, there have been over 100 parliamentary elections in Sub-Saharan Africa where competition was not permitted as a matter of state policy, concentrated in a period from the mid-1960s through the 1980s (Table 2). Meanwhile, multi-party competition has taken hold only recently, notwithstanding the flirtations immediately after independence. Since 1990, which clearly delineates the advent of a new era, 42 of the 47 countries in Sub-Saharan Africa have conducted at least one parliamentary election in which opposition parties were permitted, while competition at the district level has been prohibited on just three occasions.<sup>9</sup>

TABLE 3
THE POLITICAL ENVIRONMENT OF MULTI-PARTY ELECTIONS IN SUB-SAHARAN AFRICA®

Freedom	Politica	al Rights	Civil Liberties		
House Score	Pre-Election	Post-Election	Pre-Election	Post-Election	
1	7	9	0	0	
2	20	27	16	16	
3	12	21	17	27	
4	12	17	32	30	
5	17	22	36	31	
6	37	14	14	9	
7	11	6	1	3	
Total	116	116	116	116	
Average	4.44	3.71	4.16	3.99	

Even with these recent developments, competition under fully free conditions is unusual: the vast majority of even the multi-party elections in Sub-Saharan Africa have been conducted amid extensive restrictions on freedom of speech, the right to assemble and other basic tenets of open democracy (Table 3).<sup>11</sup> To be fair, there are settings where such circumstances are far less prevalent, e.g., Botswana, Gambia, Mauritius, Namibia, South Africa since 1994. Moreover, electoral environments have steadily improved and are presumably a significant contributing factor in the increasingly favorable evaluations of political conditions across the region, although it appears that they have not consistently paved the way for further enhancements in governmental protection of civil liberties (Table 4).

TABLE 4
TRENDS IN MULTI-PARTY ELECTION ENVIRONMENTS IN SUB-SAHARAN AFRICA<sup>12</sup>

Politica	ıl Rights	Civil Liberties		
House Score Pre-Election Post-Elect		Pre-Election	Post-Election	
5.61	5.19	5.08	4.95	
5.37	5.25	5.45	5.33	
4.83	4.01	4.39	4.22	
4.38	4.31	4.15	4.33	
	5.61 5.37 4.83	5.61     5.19       5.37     5.25       4.83     4.01	Pre-Election         Post-Election         Pre-Election           5.61         5.19         5.08           5.37         5.25         5.45           4.83         4.01         4.39	

In sum, one can draw several conclusions about political conditions in Sub-Saharan Africa. The first conclusion reiterates what we asserted earlier: on the whole, the settings are generally difficult, if not extreme. Thus, with rare exceptions, there is no confusing these cases with entrenched, mature democracies. Second, the specific conditions are of such a nature that they could directly and significantly affect electoral outcomes. In other words, the differences we have identified are not incidental or peripheral to our question, but rather afford a solid foundation for evaluating whether the findings from this literature have universal validity, or are instead restricted to those settings where electoral and political democracy has established a secure footing. Third, the political contexts across Sub-Saharan Africa are not homogenous and static. Instead, conditions vary somewhat both across countries and over time. Far from undermining our efforts, this variation actually creates an opportunity to bolster our argument by comparing electoral outcomes within the region.

TABLE 5
ELECTORAL SYSTEM CHOICE IN SUB-SAHARAN AFRICA

	Elections (Countries)				
Electoral System	Multi-Party	One-Party	No Parties	Total	
Single-Member Districts	81 (21)	29 ( 9)	6 (3)	116 (22)	
Single- and Multi-Member Districts	25 (8)	12 ( 3)		37 (8)	
Multi-Member Districts	55 (22)	21 ( 7)	1 (1)	77 (21)	
Single-Member Districts + National PR	14 ( 5)	3 (1)		17 ( 5)	
National PR	12 (8)	44 (14)		56 (20)	
Total	183 (47)	109 (31)	7 (4)		

A final salient consideration is that countries in Sub-Saharan Africa have employed a diverse range of electoral systems, with varying district magnitudes (Table 5). Once again, the contrasts within and among countries are ideal from a methodological perspective. Simply put, both political conditions *and* institutional context—the two factors we highlight as key influences of electoral outcomes—vary across the region.

## 3 RESEARCH ON ELECTIONS IN SUB-SAHARAN AFRICA

Because political conditions in Sub-Saharan Africa have generally been extreme—and elections often not free and fair as a result—comparative researchers who study electoral competition and party systems typically avoid this region (aside from the exceptional cases like Botswana and Mauritius). They are understandably reluctant to compare these elections with those held in other parts of the world, where basic political rights and civil liberties are routinely protected. The complexities are apparent when considering a classic question such as the one we address in this paper. At a minimum, drawing inferences about the impact of electoral laws on the number of parties can be highly misleading if fails to take into account circumstances such as political repression and its by-products. Some might even argue that given this sort of context, elections in Sub-Saharan Africa violate fundamental assumptions that underlie the theorized relationship (Cox 1997), or at the very least are too dissimilar from cases that are traditionally studied to exhibit the same empirical patterns.

The availability and reliability of data are also major concerns. Governments in Sub-Saharan Africa have not universally published or even made public comprehensive results of parliamentary elections. At times, the official reporting is limited to declarations of the victors and the relevant details are withheld. Publication of results is no guarantee, as historical records are not necessarily archived. Even when the data exist, one has no assurances of accuracy or trustworthiness: governments in the region are regularly accused of fabricating and manipulating the results they report (e.g., Uganda in 1980). Add in the fact that few of these countries have conducted elections consistently over an extended period of time, and the prospect of analysis using standard time-series techniques becomes remote.<sup>13</sup> Thus, ignoring or excluding these cases is easy, if not substantively and methodologically defensible.

Nevertheless, scholars have conducted some notable research on elections in Africa (Cowen & Laasko 1997). Most of the relevant literature surfaced during the 1990s, reflecting the wave of political liberalization and democratization that swept across much of the continent. While elections often feature in the various edited compilations about these processes (Wiseman 1995, Gros 1998, Diamond & Plattner 1999, Joseph 1999, Adejumobi 2000), a systematic treatment of the relationship between electoral systems and party systems is realistically outside the purview of these volumes. In fact, elections are typically but one dimension of a more general analysis, divided into individual country studies, rather than the express focus.

Several key contributors have, in fact, distinguished themselves as the state of the art as far as large-scale, cross-national quantitative analysis of electoral outcomes in Africa. Bratton & van de Walle (1997), for example, examines political trajectories since independence using a dataset of institutional characteristics, events (elections, coups, rebel incursions, etc.), and other salient factors. While the study is comprehensive, encompassing the full range of countries and political conditions, all of the data are national, as is the thrust of the analysis. Incentives and outcomes at the district level, as well as the broader question of how local party systems aggregate into national party systems, are largely ignored. Some researchers do pay heed to local competition, but their attention is often confined to single elections—e.g., Throup & Hornsby (1997), who examine Kenya's 1992 election—and does not endeavor to conduct systematic comparisons. Moreover, one encounters a large number of case studies that adopt a largely descriptive analytical approach and, as a result, tend to lack sufficient theoretical grounding.

An emerging literature on electoral engineering in Africa, by contrast, avoids many of these limitations. The preeminent study is Reynolds (1999), which assesses how changes in the type or particular configuration of the electoral system would have altered the results of various elections in Southern Africa. A particular focus of this and other research is the relevance of such design considerations for issues of representation and conflict management across the continent (Cohen 1997, Murithi 1998, Sisk & Reynolds 1998, Rule 2000, Mozaffar 2002, Reilly 2002, Linberg 2003). Among the central debates is whether proportional or majoritarian winner-take-all systems are best suited to the unique constellation of political discord and cultural diversity in Africa (Reynolds 1997, van de Walle 1997). The answer arguably depends upon one's priorities, but these insights are less important for our purposes than the notion common to all of the analyses, namely that electoral laws affect electoral outcomes. The studies offer considerable empirical evidence to support this relationship, yet while they acknowledge the political conditions they do not actually take account of the potential influence of such contextual factors on outcomes like the effective number of political parties. Moreover, the ultimate concern of many of these studies is the national party system. Some, in turn, disregard district-level outcomes entirely (e.g., Mozaffar 1998). Others are less interested in the *individual* district-level results, focusing instead on the correspondence of national outcomes to district averages.

In sum, several important angles remain underdeveloped, if not unaddressed, in the studies of elections and party systems in Africa. First, they draw only inconsistently on the concepts and measures that feature in the seminal research on these subjects and thus do not marshal their empirical accounts towards confronting a number of fundamental questions. Second, systematic analysis of district-level outcomes is still the exception. Third, elections conducted under extreme environments are either avoided altogether or highlighted for their various failings. The overriding conclusion, if not presumption, is that electoral competition is inadequate, yet little effort is made to investigate whether outcomes at the district level are truly extreme or instead conform to patterns we would expect based on theory and empirical evidence. Finally, election outcomes in Sub-Saharan Africa are rarely compared to election outcomes elsewhere in the world. Cross-national research on electoral laws and outcomes either ignores Africa for the most part, or focuses strictly on Africa.

## 4 RESEARCH DESIGN

To reiterate, our objective is to evaluate whether electoral laws retain their predicted and demonstrated influence over electoral competition at the district level even under extreme political environments. The basic analytical framework, in turn, is relatively simple: the outcome of interest is the nature of the local party system and the explanatory factors are the electoral system that is utilized in each district level and the prevailing political conditions around the time of an election.

## 4.1 LOCAL PARTY SYSTEMS: MEASURES AND DATA

The nature of the party system at the district level can be quantified in many ways. Among the options are winning shares or margins, "marginal seats" (Reynolds 1995),16 concentration of the opposition vote

(Coppedge 1997), and SF ratios (Cox 1994). These measures capture specific dimensions of the electoral outcomes and can conceivably be used in complementary fashion. For our particular purposes, however, the most sensible basis of analysis is the effective number of political parties (Laasko & Taagepera 1979). The advantages of this measure are multifold. First is its wide application in the literature. Second is the ease and flexibility (using either votes or shares) of calculation.<sup>17</sup> Third, the measure encapsulates a lot of information in a single term, which facilitates comparability across cases and levels of analysis. Finally, its interpretation remains consistent across electoral systems and district magnitudes.

Within a given district, the effective number of political parties (N<sub>i</sub>) is a function of the vote shares received by each party (p<sub>i</sub>):

$$\mathcal{N}_{j} = \frac{1}{\sum_{i=1}^{n} p_{i}^{2}}$$

One can, in turn, calculate the average effective number of parties across a set of districts:

$$D_N = \frac{\sum_{j=1}^d N_i}{d}$$

In essence, both of these measures take account of the relative strength of each candidate or party: those capturing large segments of the electorate rate as more significant than those with less support.<sup>18</sup>

Consistent with the problems described earlier, we encountered serious challenges while trying to compile the necessary data from elections conducted in Sub-Saharan Africa. For many of the countries, primary sources are inaccessible; certain records may even be permanently irretrievable. The Internet has improved the situation somewhat, though its impact is confined primarily to elections conducted during the last several years. Secondary sources offer an important complement, albeit with notable limitations. In particular, many only list the distribution of seats awarded and maybe vote shares or counts for the principal parties. Those with more complete results do not always extend beyond the national (occasionally regional) level. A few provide district-level returns, but encompass just the last election in at most several countries.

The archive of election results that we ultimately compiled is a patchwork of information that relies principally upon the following sources:

- Official materials such as reports of national election commissions and government websites.
- The encyclopedic *Elections in Africa* (Nohlen, et al. 1999).
- Comparative (Wiseman 1990; Olukoshi 1998; Daniel, et al. 1999; Reynolds 1999; Rule 2000) and country/election-specific analyses (Falola & Ihonvbere 1985; Throup & Hornsby 1997; Salih 2001).
- On-line reference collections, including Adam Carr's Election Archives (www.adam-carr.net), Election World (www.Electionworld.org) and the International Foundation for Electoral Systems' Election Guide (www.electionguide.org).
- Country profiles compiled by the Interparliamentary Union (www.ipu.org).
- Judy Geist's personal collection on Kenya.

The data archive is unique in its depth, if not its sheer scope. The centerpiece is comprehensive returns from over 3,400 single-member district contests across 30 elections in nine countries. In addition, we were able to locate detailed results for over 200 multi-member district contests across 18 elections in 10 countries, as well as 12 elections from eight countries that relied strictly upon national proportional representation (Table 6).<sup>19</sup>

TABLE 6
ELECTION DATA

## SINGLE-MEMBER DISTRICTS

Country	Contests	Election Years
Botswana	243	1969, 1974, 1979, 1984, 1989, 1994, 1999
Burkina Faso	12	1997
Gambia	40	1997
Ghana	400	1996, 2000
Kenya <sup>20</sup>	1,496	1963, 1969, 1974, 1979, 1983, 1988, 1992, 1997, 2002
Lesotho	222	1993, 1998, 2002
Malawi	192	1999
Zambia	450	1991, 1996, 2001
Zimbabwe	360	1990, 1995, 2000

## **MULTI-MEMBER DISTRICTS**

Country	Contests	Election Years
Burkina Faso	71	1959, 1970, 1978, 1997, 2002
Cape Verde	19	1995
Congo	6	1959
Djibouti	15	1992, 1997, 2003
Equatorial Guinea	18	1993
Guinea-Bissau	27	1994
Mauritius	21	2000
Niger	16	1993, 1999
Sao Tome	14	1991, 1994
Sierra Leone	14	2002

## NATIONAL PR SYSTEMS

Country	Election Years
Angola	1992
Benin	1960
Cape Verde	1991
Liberia	1997
Mozambique	1994, 1999
Namibia	1989, 1994, 1999
Sierra Leone	1996
South Africa	1994, 1999

Despite our ongoing efforts, we are left with substantial gaps in the data archive. In particular, we lack the results from over 10,000 single-member district contests, across 97 elections conducted in 30 countries, as well as at least several thousand multi-member district contests (the exact figure is uncertain due to incomplete information about the district magnitudes), across 57 elections conducted in 21 countries.<sup>21</sup> Overall, we are missing district-level data from 116 multi-party elections across 33 countries.<sup>22</sup>

## 4.2 EXPLANATORY FACTORS: MEASURES AND DATA

## Electoral Laws

Electoral systems have many dimensions, including the number, size (geographic and population) and regional distribution of districts; the seats at stake in each; the rules about candidate entry; the voting scheme; the method of translating votes into allocations of seats to candidates or parties, including thresholds for representation and other technical elements; the relationship between district- and national-level results, etc. We concentrate here on a single factor: district magnitude (*M*). Not only is this measure reasonably straightforward to quantify, as we have stated repeatedly it features in much of the theoretical and empirical research on the relationship between electoral laws and party systems.

#### **Political Conditions**

Our main challenge is to separate the impact of electoral laws from effects attributable to the political context. For example, if a limited number of candidates receive votes in a set of single-member districts, is it because of the logic proposed by Duverger (i.e., voters and candidates of different parties have incentives to coordinate around a two-party configuration at the local level)? Or is this outcome merely a by-product of certain restrictions on party organization (e.g., the 1992 election in Nigeria, which only two parties were permitted to contest)? Or have boycotts by one or more of the principal opposition parties (e.g., Ghana in 1992, Zimbabwe in 1995) reduced the available options? In other words, were it not for these other circumstances, the party system might bear no resemblance to a Duvergerian outcome.

Consequently, we need to be able to control for those aspects of the political environment could conceivably affect the outcomes of electoral contests at the district level. In Sub-Saharan Africa, the list includes the following factors:

- Strong presidentialism, patronage systems and other manifestations of <u>centralized authority</u> that create bandwagon incentives and foster or enhance single-party dominance.
- Repression, in the form of selective restrictions on political organizations, harassment of opposition party politicians, threats against voters, etc., that directly and indirectly reduce the number of contestants and the support they are able to attract.
- Persistent conflict between the government and its detractors, which can lead to a <u>polarization</u> of the party system and crowd out smaller competitors.
- War, conflict and other social and political disruptions that hinder candidates (and parties) who lack resources and infrastructure and thus depend upon grassroots mobilization.

Ultimately, these factors are highly correlated. Equally significant, in terms of our expectations about their impact on electoral outcomes, all seemingly yield the same null hypothesis: the more extreme the context, the greater the concentration of votes among a limited number of candidates and therefore the lower the effective number of political parties at the district level. When conditions are particularly severe, one would presume that the candidate of the ruling party will be the principal beneficiary and any support for opposition candidates will be limited and fail to coalesce.<sup>23</sup>

Since our aim is to differentiate the impact of the institutional environment as versus the political context, rather than to disaggregate the latter's effects, collapsing these various underlying factors into a single variable is methodologically and analytically prudent. The particular measure we opt to employ is the POLITY score (Marshall & Jagger 2000). Formally, this is calculated as the difference between the institutionalized democracy and institutionalized autocracy scores, which are also supplied in the same dataset. Each of these scores, in turn, is an amalgam of several other more specific measures. The former is constructed based on

the competitiveness and openness of executive recruitment, the constraints on the chief executive, and the competitiveness of political participation. The latter is constituted using these same measures—albeit scored in a different manner—with the regulation of participation added to the mix. Thus, the aggregate POLITY measure encompasses many of the factors that we identify as potential advantages to ruling parties and constraints upon opposition parties. As an additional consideration, POLITY scores have been assigned to countries in Africa for the entire period since independence, in contrast to some of the alternative measures of political environments (e.g., Freedom House scores date back only to 1972).

## Social Diversity

As we noted earlier, the composition of the electorate can also affect district-level outcomes: heterogeneous communities tend to favor a greater number of parties relative to homogenous communities. Ethnic, linguistic, religious and regional diversity are, in fact, the norm throughout Sub-Saharan Africa. This creates the prospect of Duvergerian outcome from the netting out of two effects: whereas the cultural landscape encourages a proliferation of candidates and parties, repression and other circumstances inhibit entry and organization. Unfortunately, the data we would require in order to control for the effects of this variable are unavailable at the district level and incomplete—especially as far as annual time series that covers the period in question—at the national level. Thus, our analysis will remain suggestive rather than conclusive.

#### 5 ANALYSIS

To assess the impact of institutional environment and political context on district-level electoral outcomes in Sub-Saharan Africa, we have undertaken two types of analyses. First, we compare different electoral systems—or more specifically, different district magnitudes. Second, we then focus strictly on single-member district electoral systems, thereby holding this key aspect of the institutional environment constant, and examine how our sample of countries in Sub-Saharan Africa measure up to each other as well as to four established democracies (Canada, India, UK, US).

#### 5.1 VARYING ELECTORAL SYSTEMS AND POLITICAL CONTEXT

Ideally, we would conduct multivariate analyses to determine the marginal effect of electoral laws and contextual factors on district-level electoral outcomes. Unfortunately, we were able to compile data on just 233 contests where the district magnitudes are greater than one. Moreover, these cases are clustered together in certain countries and election years, each with a particular configuration of multi-member districts. As a result, the contextual variables are correlated with the variables measuring the size of the districts. If we appropriately control for both institutional variation and country-specific contextual factors, in order to avoid misleading but unmeasured correlations across groups of cases, a limited set of cases—those in countries where district magnitude varies—ultimately determine the inferences we can draw from the results. To be more specific, say we estimated coefficients for regressing the effective number of parties on dummy variables for each country-year, district magnitude and the polity score. We simply do not have enough multi-member district cases across different countries to gain any leverage because the variation across cases would largely be explained by country-year dummy variables. This is a serious limitation.

A flawed and first-cut, but defensible, approach given the limitations of our data is to regress the effective number of parties on just the polity scores and the size of the electoral districts. Again, the major weakness of this approach is that the errors across cases will be highly correlated because the cases cluster together into specific country-year groups, even though we treat the cases as independent observations. Consequently, even though our coefficient estimates are unbiased, they are not efficient and the measures of statistical significance are misleading. With these caveats in mind, we believe we can still learn something about our data from such an analysis.

TABLE 5
MODEL OF PARTY SYSTEM OUTCOMES IN SUB-SAHARAN AFRICA

Dependent variable: N

Independent Variables	Coefficient	Standard Error	t-statistic	Significance
Constant	2.090	0.023	92.238	0.000
M	0.038	0.013	2.917	0.004
POLITY	0.007	0.003	2.579	0.010
n = 3,158 F = 7.564 $R^2 = 0.005$				

We can see from Table 5 that both polity scores and the size of the electoral districts are marginally correlated with the effective number of parties in the district. While we cannot be confident of the standard errors and the significance tests, we can be reasonably certain that the greater the size of the electoral districts in these countries, the more candidates receive votes in the districts. Controlling for a measure of political context (i.e., the POLITY score), electoral institutions matter in shaping electoral competition. Furthermore, and not surprisingly, controlling for the size of the electoral districts, the political context matters, in that freer and fairer election environments result in to greater numbers of parties or candidates competing and winning substantial votes at the district level. In both instances, the estimated impact is relatively small. For example, the effective number of parties is expected to be roughly 0.34 higher in a district with 10 seats at stake than it is in a single-member district. Meanwhile, the predicted difference between a strongly autocratic country (POLITY=-10) and a strongly democratic country (POLITY=+10) is just 0.14 effective parties. Based on this provisional analysis, therefore, political conditions have an impact but do not play an overriding role in determining electoral outcomes at the district level. Instead, electoral institutions appear to retain their influence.

## 5.2 HOLDING THE INSTITUTIONAL CONTEXT CONSTANT

Our strategy at this point is to control for institutional context and ask whether the extreme political conditions present in many Sub-Saharan African countries alter political outcomes to such an extent that they stand in stark contrast to those from other countries—both in the region and elsewhere—with far more favorable conditions. This is accomplished by focusing on the single-member district contests.<sup>24</sup> We begin by examining overall distribution of electoral outcomes for the particular sample of cases on which we have data. We then examine whether the outcomes vary dramatically across the nine Sub-Saharan Africa countries, in ways that might correlate with contextual differences. Finally, we compare the patterns of outcomes from Sub-Saharan Africa to patterns from four countries outside the region (Canada, India, UK, US). The fundamental question we address here is the following: do electoral politics in Sub-Saharan Africa look altogether different than electoral politics in other countries? If so, perhaps the extreme conditions that are present in many of the African cases cause those differences. If not, then perhaps the institutional influences "cut through" the extreme conditions.

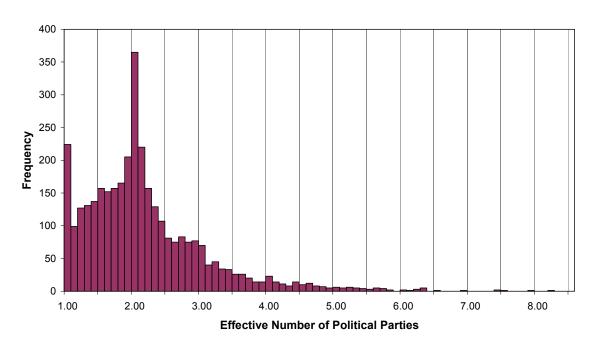


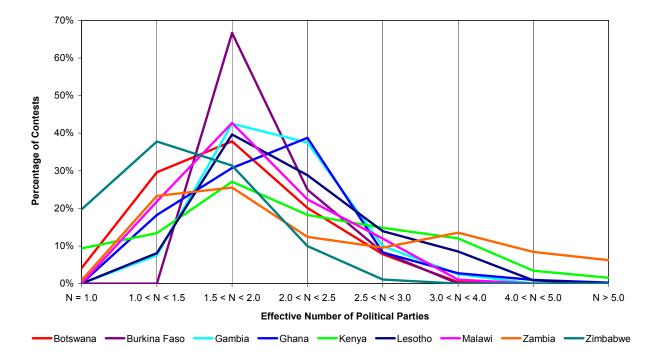
FIGURE 2
ELECTORAL OUTCOMES OF SINGLE-MEMBER DISTRICT ELECTIONS ACROSS SUB-SAHARAN AFRICA

As we can see from Figure 2, the fundamental prediction from Duverger's Law—single-member district elections lead to two parties—receives considerable empirical support. While there are numerous cases of single-candidate or single-party dominance, and other cases of highly fragmented local party systems, the largest mode is clearly at two effective parties. The number of uncontested races, moreover, is not all that different than the number of uncontested races that occur in the U.S. in some periods. Granted, the reasons for the lack of competitiveness might be different in the U.S. than in Sub-Saharan Africa, though those differences may not be as pronounced as one might believe at first glance.<sup>25</sup>

To delve further into these data, we compare the patterns of outcomes across the nine countries represented in our sample. Figure 3 highlights a couple of significant features of the data. With the exception of Ghana and Zimbabwe, the mode of effective number of political parties in each country is two (Figure 3). Several of the countries have relatively flat distributions, especially Kenya and Zambia, implying significant variation in electoral outcomes across districts. As a result, the mean effective number of political parties at the district level in these two countries is higher than it is in the other seven (Table 8). Yet most of the countries are close to the Duvergerian norm. Included in this category is Kenya, which limited eligibility to members of the ruling KANU party, but permitted multiple candidates, in five of its nine elections to date (1969-1988). Zimbabwe is something of an exception, with the low number attributable in part to the primary opposition party's boycott of the 1995 election. Botswana, traditionally regarded as a leading democratic light in Africa, has averaged less than 1.8 parties at the district level since independence.

To the extent that there is a conventional image of African elections as having attenuated competition and lack of opposition to the ruling parties, these data offer somewhat of a correction. Across the districts, there is a blend of single-party dominance, conventional two-party competition, and party system fragmentation. The variation within countries is an indication of heterogeneity in electoral environments, as clearly factors besides the electoral system—again, single-member plurality is common to all the cases—must be influencing the distribution of votes across parties and candidates. Majority parties may enjoy varying levels of strength, or apply different forms of influence or coercion, in different regions. In some regions, the opposition could be quite fragmented, whereas in others it could be unified around specific causes or party labels.

FIGURE 3
PARTY SYSTEMS IN SINGLE-MEMBER DISTRICTS ACROSS SUB-SAHARAN AFRICA



 ${\bf TABLE~8} \\ {\bf DATA~FROM~SUB\text{-}SAHARAN~AFRICA~ON~PARTY~SYSTEMS~IN~SINGLE\text{-}MEMBER~DISTRICTS}$ 

Category	Botswana	Burkina Faso	Gambia	Ghana	Kenya	Lesotho	Malawi	Zambia	Zimbabwe	All
$N_{j} = 1.0$	4.1%	0.0%	0.0%	0.0%	9.4%	0.0%	0.0%	0.9%	19.7%	6.6%
$1.0 \leq N_j \leq 1.5$	29.6%	0.0%	7.5%	18.3%	13.4%	8.1%	21.9%	23.3%	37.8%	19.0%
$1.5 < N_j \le 2.0$	37.9%	66.7%	42.5%	30.8%	27.1%	39.6%	42.7%	25.6%	31.4%	30.6%
$2.0 \le N_j \le 2.5$	20.2%	25.0%	37.5%	38.8%	18.2%	28.8%	22.4%	12.4%	10.0%	20.3%
$2.5 < N_j \le 3.0$	7.8%	8.3%	10.0%	8.3%	14.8%	14.0%	12.0%	9.6%	1.1%	11.1%
$3.0 < N_j \le 4.0$	0.4%	0.0%	2.5%	2.8%	12.0%	8.6%	1.0%	13.6%	0.0%	8.1%
$4.0 < N_j \le 5.0$	0.0%	0.0%	0.0%	1.0%	3.4%	0.9%	0.0%	8.4%	0.0%	2.8%
$N_j > 5.0$	0.0%	0.0%	0.0%	0.3%	1.5%	0.0%	0.0%	6.2%	0.0%	1.5%
$N_{\mathrm{D}}$	1.77	1.98	2.09	1.99	2.23	2.15	1.90	2.50	1.47	2.10
$\sigma(N_{i})$	0.51	0.34	0.41	0.57	0.96	0.58	0.46	1.29	0.40	0.90
Contests	243	12	40	400	1,496	222	192	450	360	3,415
Elections	7	1	1	2	9	3	1	3	3	30

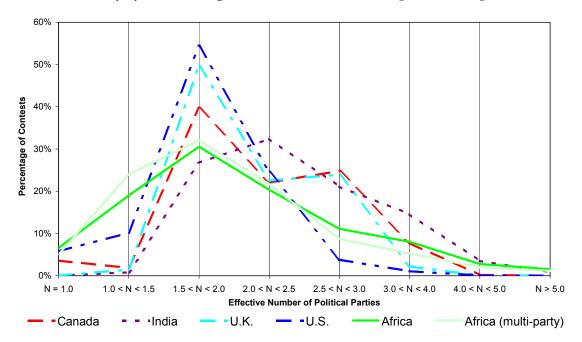
Next, we integrate data from Chhibber & Kollman (2003) in order to compare the single-member district elections in these nine countries from Sub-Saharan Africa to those in four other prominent single-member district countries: Canada, Great Britain, India, and the United States. With the possible exception of India, these comparison countries have experienced conditions much more conducive to free and fair elections in comparison to those in all of our African countries. Even India has a post-Independence tradition of quite open electoral competition, with flourishing minor parties and regional parties, and even communist parties.<sup>26</sup>

Once again, we present the data in two forms. Figure 4 indicates that the mode in Africa is similar to those in the other countries. If anything, India registers as the most noticeable outlier, in that its mode is closer to 2.5. As a general matter, the Sub-Saharan African countries are comparable to India in that they exhibit significant levels of local party system fragmentation. A potential explanation is cultural diversity: both India and Africa are renowned for their multitude of ethnic, religious, and linguistic groupings, the presence of which likely has an impact on the number of parties that can be sustained at the national as well as the district level. This pattern is counterbalanced by a striking resemblance between Sub-Saharan Africa and the US as far as the substantial proportion of effectively non-competitive contests (i.e.,  $N_j \le 1.5$ ). The cause could essentially be the same for both: the distinct advantage enjoyed by many incumbents (U.S.) and members of dominant parties (Sub-Saharan Africa). What is interesting is that this apparent advantage, while substantial, is by no means universal, even in a region where governments have historically undertaken to quash opposition and secure the status of their own preferred candidates.

In fact, the flatter distribution for the cases from Sub-Saharan Africa reaffirms the finding that there is considerable diversity across the region in the nature of district-level electoral competition. Several factors could be driving this variation—the composition of the electorate, the appeal of different candidates, etc. Yet another potential explanation is that the impact of the political contextual factors we have discussed throughout this paper is not constant across all electoral districts within a given election. Instead of a single national effect, it is perhaps more appropriate to think of various different local effects. The incentives voters have to support major, national parties versus smaller, regional parties, or incumbent parties versus opposition parties, or mainstream parties versus more extreme ideological parties, will depend to a significant extent on local conditions. This is evident from the results: one party may win most or all of the votes in certain single-member districts in a particular election year in a country, but in other districts in the same country and same election year, two parties win all the votes, and in still others, many parties split the vote. While this is true in our countries of comparison—even Canada and the UK, for example—the variation in outcomes is greatest across Sub-Saharan Africa. So here is where the political contextual factors we have emphasized might have their greatest impact: in the uneven restructuring of incentives for voters across different regions and electoral districts. While national conditions will obviously exert considerable influence at the district level, our data are consistent with the idea that local conditions are a significant factor.

This finding has important implications for further research in this area. In particular, country-level data on political repression and other such factors may not capture meaningful variation across local and regional levels. Of course, district-specific data would be ideal, though this is not currently available and has traditionally been impractical to collect for the countries in which extreme conditions are prevalent.

FIGURE 4
Local Party Systems in Single-Member Districts: A Comparative Perspective <sup>27</sup>



 $\begin{tabular}{ll} Table 9 \\ Comparative Data on Local Party Systems in Single-Member Districts $^{28}$ \\ \end{tabular}$ 

Category	Canada	India	UK	US	Sub-Saharan Africa	Sub-Saharan Africa (Multi-Party)
$N_{j} = 1.0$	3.6%	0.0%	0.0%	5.8%	6.6%	5.0%
$1.0 < N_j \le 1.5$	1.8%	0.8%	1.5%	10.2%	19.0%	24.0%
$1.5 < N_j \le 2.0$	40.9%	27.1%	49.8%	54.5%	30.6%	32.0%
$2.0 < N_j \le 2.5$	20.9%	32.0%	22.5%	24.5%	20.3%	21.7%
$2.5 < N_j \le 3.0$	24.8%	21.1%	24.0%	3.8%	11.1%	8.7%
$3.0 < N_j \le 4.0$	7.7%	14.6%	2.2%	1.1%	8.1%	5.3%
$4.0 < N_j \le 5.0$	0.2%	3.5%	0.0%	0.1%	2.8%	2.0%
$N_{\rm j} > 5.0$	0.0%	0.9%	0.0%	0.0%	1.5%	1.2%
$N_{\mathrm{D}}$	2.27	2.52	2.21	1.87	2.10	1.97
$\Sigma(N_i)$	0.54	0.71	0.40	0.43	0.90	0.81
Contests	8,544	5,348	15,932	28,710	3,415	2.596
Elections	36	11	27	153	30	25

## 6 CONCLUSION

Do the theoretical predictions about the relationship between specific features of electoral institutions and election outcomes, many of which have been corroborated by cross-national empirical studies, hold up under extreme environments? To a large extent, they do in Sub-Saharan Africa. As it turns out, electoral outcomes in Sub-Saharan Africa are not as extreme as the contexts suggest they could be. A priori, one might expect that the effective number of parties would be noticeably lower and skewed towards non-competitive outcomes, but instead the modal tendencies and distribution of outcomes look a lot like those in other countries that lack such extreme conditions. This fact is surprising, though we have to admit that we cannot, in this paper, settle the ultimate question of whether it is the institutional context or the other factors that cause the patterns we observe in our sample of elections from Sub-Saharan Africa. Which factors the matter most is hard to determine, and we admit to presenting only a piece of this difficult puzzle.

There is wide agreement within the well-developed literature on elections and party systems that both institutional arrangements *and* political context matter, yet most studies confine their attention to established democracies and countries with long histories of competitive elections. We instead have focused on a region where conditions since independence have generally been unaccommodating, even hostile, to electoral competition. Affirming the standard propositions and empirical results from the literature in these settings lends further credibility to conclusions about the relationship between electoral systems and party systems.

Another motivation is the limited number of studies of elections and parties in Sub-Saharan Africa that seek to summarize and compare patterns of electoral competition across a range of countries. The lack of research is at least partly attributable to issues of data unavailability, as well as a preemptive skepticism owing to the political conditions that have prevailed in these countries. Rather than resign ourselves to the status quo of discarding these cases from consideration, we compiled our own dataset of election returns—comprised of results from over 3,600 district-level contests across 60 elections conducted in 26 different countries—to permit us to undertake rigorous quantitative analysis and come to conclusions of our own.

#### Notes

- <sup>1</sup> See Lijphart 1994, Cox 1997, and Powell 2000 for recent summaries.
- <sup>2</sup> For example, in the Comparative Study of Electoral Systems project, African countries were included only recently and the data are not yet publicly available.
- Authors' calculations based on Polity IV Dataset (Marshall & Jagger 2000). Averages exclude periods of foreign interruption, interregnum and transition, except in the case of polity scores.
- Calculated based on data since 1954, when Sudan became the first African country (other than South Africa) to gain its independence.
- <sup>5</sup> Calculated based on data since 1994, when South Africa held its first post-apartheid elections.
- 6 Polity IV Country Reports (http://www.cidcm.umd.edu/inscr/polity/report.htm), accessed on March 25, 2003.
- <sup>7</sup> Based primarily on information from Nohlen, Krennerich & Thibaut (1999).
- <sup>8</sup> In each of these cases, multiple candidates were permitted at the district level and political parties were ostensibly free to organize, but candidates could not run on party labels (including that of the ruling party).
- <sup>9</sup> The only exceptions are the Democratic Republic of Congo (Zaire), Rwanda, Somalia, Sudan and Swaziland. Extenuating circumstances—civil war, genocide, etc.—must be acknowledged in the first four cases, though Sudan joined Swaziland in conducting a pair of elections during this time frame.
- Authors' calculations based on data from Freedom House (2003). The Freedom House scores extend back only to 1972. The attribution of pre- and post-election scores reflects the distinctive reporting cycle. For example, we assign South Africa's first democratic election in 1994 a pre-election value based on the 1993-94 score and a post-election value based on the 1994-95 score.

- Multi-party elections still compare favorably to one-party elections, both in terms of the conditions under which they are conducted and their resulting impact on the political environment. For the 73 one-party cases on which we have Freedom House data, the average pre- and post-election political rights scores were 6.14 and 6.08, respectively, while the average civil liberties score remained static at 5.90.
- 12 Ihid
- Two additional circumstances complicate the analysis. First, some countries have conducted a number of elections over the decades, separated by periods of authoritarian or military government (e.g., Nigeria). Second, countries change their electoral systems with considerable regularity. Even leaving aside a host of modifications to the number, magnitude and boundaries of districts, 22 countries have employed two different systems, seven have employed three different systems and still others have swapped back to a system that was employed for an earlier election.
- <sup>14</sup> Clapham (1997), Lumumba-Kasongo (1998), Adebayo (1999) and Bogaards (2000) examine party systems and political opposition in Africa at greater length.
- We would note that many of these "what-if" simulations are relatively crude: all that is entailed is simply to regroup—whether geographically or procedurally—the votes as they were actually cast. In effect, therefore, voters' incentives are assumed to remain constant, notwithstanding the substitution of a new or modified electoral system. This assumption is incongruous in the context of an argument premised on the notion that these systems have important consequences and are not just incidental overlays whose influence comes into play only after voters have cast their ballots and legislative seats must be allocated.
- Reynolds (1995) defines marginal seats as any district where the winning margin is less than 10 percent of the votes cast
- <sup>17</sup> In addition, the calculation of the effective number of political parties is not particularly sensitive to the omission or pooling of parties with small fractions of the overall vote, which is important in settings where data are incomplete or the relevant detail is unavailable. Taagepera (1997) offers an approach for handling instances of missing data.
- <sup>18</sup> Kesselman (1966) proposed a measure of the effective number of political parties (I) that places disproportionate weight on parties that receive only a small share of the total vote. Molinar (1991) proposed a third measure (NP) that has just the opposite effect, giving greater weight to the share captured by the winning party.
- We exclude from our analysis the national results of 17 elections from five countries that employed a combination of single-member districts and national PR. In these systems, voters cast ballots only at the district level. Compensatory seats are later allocated based upon parties' aggregate vote shares across the districts. For all practical purposes, therefore, the incentives of both voters and parties closely mimic those in single-member district systems, rather than in national PR systems. For this reason, we include in our analysis the district-level results from Lesotho's 2002 election, where such a mixed electoral system was utilized.
- 20 Kenya's parliamentary elections from 1969 through 1988 (872 single-member districts in all) were formally single party—restricted to the ruling Kenyan African National Union (KANU)—but there were essentially no limitations upon the number of candidates. As a result, at least three candidates contested most districts, and crowded fields of 10 or more were not unusual.
- The first list is comprised of Burundi (1965); Cameroon (1964, 1992, 1997, 2002); the Central African Republic (1993, 1998); Chad (1997, 2002); Comoros (1972, 1992, 1993, 1996); Congo-Brazzaville (1992, 1993, 2002); Ethiopia (1995, 2000); Gabon (1990, 1996, 2001); Gambia (1966, 1972, 1977, 1982, 1987, 1992); Ghana (1956, 1969, 1979); Guinea (1995, 2002); Ivory Coast (1990, 1995, 2000); Lesotho (1965, 1970); Madagascar (1960, 1965, 1970, 1977, 1983, 1989, 1993, 1998, 2002); Malawi (1994); Mali (2002); Mauritania (1992, 1996, 2001); Nigeria (1959, 1964, 1979, 1983, 1992, 1999); Senegal (1959, 1978, 1983, 1988, 1993, 1998, 2001); Seychelles (1993, 1998, 2002); Sierra Leone (1962, 1967, 1973, 1977); Somalia (1960, 1964, 1969); Sudan (1953, 1958, 1965, 1968, 1986, 1996, 2000); Swaziland (1993, 1998); Tanzania (1995, 2000); Togo (1958, 1994, 1999, 2002); Uganda (1962, 1980, 1996, 2001); Zaire (1965); Zambia (1964, 1968); and Zimbabwe (1985). The second list—with some overlap owing to countries that employ both single- and multi-member districts—is comprised of Benin (1959, 1991, 1995, 1999); Burkina Faso (1992); Burundi (1961, 1993); Cameroon (1964, 1992, 1997, 2002); Cape Verde (2001); the Central African Republic (1959); Chad (1959, 1997, 2002); Equatorial Guinea (1968, 1999); Guinea-Bissau (1999); Ivory Coast (1990, 1995, 2000); Liberia (1985); Madagascar (1960, 1965, 1970, 1977, 1983, 1989, 1993, 1998, 2002); Mali (1959, 1992, 1997); Mauritania (1992, 1996, 2001); Mauritius (1967, 1976, 1982, 1983, 1987, 1991, 1995); Niger (1995, 1996); Rwanda (1961); Sao Tome (1998, 2002); Somalia (1964, 1969); Swaziland (1967, 1972, 1980); and Zaire (1960, 1965).
- On the other hand, we did manage to compile at least some results for all 299 elections that have been conducted by the 47 countries of Sub-Saharan Africa.

- <sup>23</sup> Cox (1990) makes a similar argument.
- Other than Burkina Faso in 1997 (single- and multi-member districts) and Lesotho in 2002 (compensatory seats awarded via national PR), all of the cases are drawn from strictly single-member district electoral systems.
- <sup>25</sup> Consider conditions throughout the South prior to the Civil Rights movement and the Voting Rights Acts.
- Of course, in areas such as Kashmir, conditions are not always conducive to free and fair elections in India, but these are exceptions to the general pattern.
- For details on the countries and elections reflected in the data for Sub-Saharan Africa, see Table 6. All comparative data are drawn from Chhibber & Kollman (2003). The Canadian data is comprised of all elections for the parliament from 1867 through 1997. The Indian data is comprised of Lok Sabha elections from 1957 through 1999 in 16 states (Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh, West Bengal). The U.K. data is comprise of all single-member district elections for the House of Commons from 1885 through 1992. The U.S. data is comprised of all elections for the U.S. House of Representatives from 1788 through 1990, excluding those conducted in the South (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia).
- For details on the countries and elections reflected in the data for Sub-Saharan Africa, see Table 6. All comparative data are drawn from Chhibber & Kollman (2003). The Canadian data is comprised of all elections for the parliament from 1867 through 1997. The Indian data is comprised of Lok Sabha elections from 1957 through 1999 in 16 states (Andhra Pradesh, Assam, Bihar, Gujarat, Haryana, Himachal Pradesh Karnataka, Kerala, Madhya Pradesh, Maharashtra, Orissa, Punjab, Rajasthan, Tamilnadu, Uttar Pradesh, West Bengal). The U.K. data is comprise of all single-member district elections for the House of Commons from 1885 through 1992. The U.S. data is comprised of all elections for the U.S. House of Representatives from 1788 through 1990, excluding those conducted in the South (Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, and Virginia).

## **BIBLIOGRAPHY**

Adejumobi, Said. 2000. "Elections in Africa: A Fading Shadow of Democracy?" *International Political Science Review*, 21(1): 59-73.

Amorim, Octavio Neto and Gary Cox. 1997. "Electoral Institutions, Cleavage Structures, and the Number of Parties," *American Journal of Political Science*, 41: 149-174.

Barkan, Joel. 1995. "Elections in Agrarian Societies," Journal of Democracy, 6 [October]: 106-116.

Bogaards, Matthijs. 2000. "Crafting Competitive Party Systems: Electoral Laws and the Opposition in Africa." *Democratization* 7(4) [Winter]: 163-190.

Bratton, Michael. 1999. "Second Elections in Africa," in Larry Diamond and Marc Plattner eds. *Democratization in Africa*. Baltimore: Johns Hopkins University Press.

Bratton, Michael and Nicholas van de Walle. 1997. Democratic Experiments in Africa: Regime Transitions in Comparative Perspective. New York: Cambridge University Press.

Chhibber, Pradeep and Ken Kollman. 1998. "Party Aggregation and the Number of Parties in India and the United States," *American Political Science Review*, 92(3): 329-342.

Chhibber, Pradeep and Ken Kollman. 2003. The Formation of National Party Systems: Federalism and Party Competition in Britain, Canada, India and the United States. forthcoming.

Chhibber, Pradeep and Mariano Torcal. 1997. "Elite Strategy, Social Cleavages and Party Systems in a New Democracy: Spain," *Comparative Political Studies*, 30(1): 27-54.

Clapham, Christopher. 1997. "Opposition in Tropical Africa," Government and Opposition, 32(4) [Autumn]: 541-556.

Cohen, Frank. 1997. "Proportional versus Majoritarian Ethnic Conflict Management in Democracies," Comparative Political Studies, 30(5) [1997]: 607-630.

Coppedge, Michael. 1997. "District Magnitude, Economic Performance, and Party-System Fragmentation in Five Latin American Countries," *Comparative Political Studies*, 30(2): 156-185.

Cowen, Michael and Liisa Laakso. 1997. "An overview of election studies in Africa," *Journal of Modern African Studies*, 35(4) [1997]: 717-44.

Cowen, Michael and Liisa Laakso eds. 2002. Multi-Party Elections in Africa. Oxford: James Currey.

Cox, Gary. 1990. "Centripetal and Centrifugal Incentives in Electoral Systems," *American Journal of Political Science*, 34: 903-935.

Cox, Gary. 1994. "Strategic Voting Equilibria under the Single Nontransferable Vote," *American Political Science Review*, 88(3): 608-621.

Cox, Gary. 1997. Making Votes Count: Strategic Coordination in the World's Electoral Systems. New York: Cambridge University Press.

Daniel, John, Roger Southall and Morris Szeftel eds. 1999. Voting for Democracy: Watershed Elections in Contemporary Anglophone Africa. Brookfield, VT: Ashgate Publishing Company.

Diamond, Larry and Marc Plattner eds. 1999. *Democratization in Africa*. Baltimore: Johns Hopkins University Press.

Duverger, Maurice. 1954. Political Parties: Their Organization and Activity in the Modern State. New York: Wiley.

Fedderson, Timothy J. 1992. "A Vote Model Implying Duverger's Law and Positive Turnout," *American Journal of Political Science*, 36(4): 938-962.

Fey, Mark. 1997. "Stability and Coordination in Duverger's law: A Formal Model of Preelection Polls and Strategic Voting," *American Political Science Review*, 91(1): 135-147.

Freedom House. 2003. Freedom in the World. New York: Freedom House.

Gaines, Brian. 1997. "Where to Count Parties," Electoral Studies, 16(1): 49-58.

Gros, Jean-Germain ed. 1998. Democratization in Late Twentieth-Century Africa: Coping with Uncertainty. Westport, CT: Greenwood Press.

Hayward, Fred ed. 1987. Elections in Independent Africa. Boulder: Westview Press.

Johnston, Alexander. 1995. "South Africa: the Election and the Emerging Party System," *International Affairs*, 70 [October]: 721-736.

Joseph, Richard ed. 1999. State, Conflict and Democracy in Africa. Boulder, CO: Lynne Rienner Publishers.

Kesselman, Mark. 1966. "French Local Politics: A Statistical Examination of Grass Roots Consensus," American Political Science Review, 60: 963-73.

King, Desmond and Kenneth Janda. 1985. "Formalizing and Testing Duverger's Theories on Political Parties," *Comparative Political Studies*, 18: 139-69.

Laasko, Marku and Rein Taagepera. 1979. "Effective Number of Parties: A Measure with Application to West Europe," *Comparative Political Studies*, 12: 3-27.

Lijphart, Arend. 1990. "The Political Consequences of Electoral Laws, 1945-1985," *American Political Science Review*, 84: 481-96.

Lijphart, Arend. 1994. Electoral Systems and Party Systems: A Study of Twenty-Seven Democracies, 1945-1990. Oxford: Oxford University Press.

Lindberg, Staffan. 2003. "Consequences of Electoral Systems in Africa: A Preliminary Inquiry," unpublished manuscript, Department of Political Science, Lund University.

Lumumba-Kasongo, Tukumbi. 1998. The Rise of Multipartyism and Democracy in the Context of Global Change: The Case of Africa. Westport, CT: Praeger.

Mainwaring, Scott and Timothy Scully. 1995. Building Democratic Institutions: Party Systems in Latin America. Stanford, CA: Stanford University Press.

Marshall, Monty and Keith Jagger. 2000. Polity IV Project: Political Regime Characteristics and Transitions, 1800-1999.

Molinar, Juan. 1991. "Counting the Number of Parties: An Alternative Index," *American Political Science Review*, 85: 1383-91.

Mozaffar, Shaheen. 1998. "Electoral Systems and Conflict Management in Africa: A Twenty-Eight-State Comparison, Chapter 5 in Timothy Sisk and Andrew Reynolds eds. *Elections and Conflict Management in Africa*. Washington, DC: United States Institute of Peace Press.

Mozaffar, Shaheen. 2002. "Patterns of Electoral Governance in Africa's Emerging Democracies," *International Political Science Review*, 23(1): 85-101.

Murthi, Timothy. 1997. "Electoral Systems and the Management of Ethnic Conflict in Africa," unpublished manuscript, Keele University.

Nohlen, Dieter, Michael Krennerich and Bernard Thibaut eds. 1999. *Elections in Africa*. Oxford: Oxford University Press.

Olukoshi, Adebayo ed. 1998. Politics of Opposition in Contemporary Africa. Uppsala: Nordiska Afrikainstitutet.

Ordeshook, Peter and Olga Shvetsova. 1994. "Ethnic Heterogeneity, District Magnitude and the Number of Parties," *American Journal of Political Science*, 38: 100-123.

Palfrey, Thomas. 1989. "A Mathematical Proof of Duverger's Law," in Peter Ordeshook ed. *Models of Strategic Choice in Politics*. Ann Arbor: University of Michigan Press.

Rae, Douglas. 1967. The Political Consequences of Electoral Laws. New Haven: Yale University Press.

Reich, Gary. 2001. "Coordinating Party Choice in Founding Elections," *Comparative Political Studies*, 34(10): 1237-1263.

Reilly, Benjamin. 2002. "Electoral Systems for Divided Societies," Journal of Democracy, 13(2) [April]: 156-170.

Reynolds, Andrew. 1995a. "Constitutional Engineering in Southern Africa," *Journal of Democracy*, 6(2) [April]: 86-99.

Reynolds, Andrew. 1995b. "The Case for Proportionality," Journal of Democracy, 6(4) [October]: 117-124.

Reynolds, Andrew. 1999. Electoral Systems and Democratization in Southern Africa. New York: Oxford University Press.

Riker, William. 1976. "The Number of Political Parties: A Re-examination of Duverger's Law," *Comparative Politics*, 9: 93-106.

Riker, William. 1982. "The Two-Party System and Duverger's Law," *American Political Science Review*, 76: 753-766.

Rule, Stephen. 2000. Electoral Territoriality in Southern Africa. Burlington, VT: Ashgate Publishing Company.

Shugart, Matthew. 1985. "The Two Effects of District Magnitude: Venezuela as a Crucial Experiment," European Journal of Political Research, 13: 353-64.

Shugart, Matthew and John Carey. 1992. Presidents and Assemblies: Constitutional Design and Electoral Dynamics. New York: Cambridge University Press.

Sisk, Timothy and Andrew Reynolds eds. 1998. *Elections and Conflict Management in Africa*. Washington, DC: United States Institute of Peace Press.

Taagepera, Rein. 1997. "Effective Number of Parties for Incomplete Data," Electoral Studies, 16:145-51.

Taagepara, Rein and Matthew Shugart. 1989. Seats and Votes: The Effects and Determinants of Electoral Systems. New Haven: Yale University Press.

Taagepara, Rein and Matthew Shugart. 1993. "Predicting the Number of Parties: A Quantitative Model of Duverger's Mechanical Effect," *American Political Science Review*, 87: 455-64.

Throup, David and Charles Hornsby. 1998. Multi-Party Politics in Kenya: The Kenyatta & Moi States & the Triumph of the System in the 1992 Election. Athens, OH: Ohio University Press.

Van de Walle, Nicolas. 1995. "Crisis and Opportunity in Africa," Journal of Democracy 6(2) [April]: 128-141.

Wiseman, John ed. 1995. Democracy and Political Change in Sub-Saharan Africa. New York: Routledge.