Rural Bias in African Electoral Systems:
Unequal Representation in Single Member District Elections

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Introduction

The third wave of democracy reached sub-Saharan Africa in the early 1990s, rapidly altering the dynamics of the political competition in most countries in the region (Huntington 1991). Within a few years, multiparty elections had been held in a majority of the countries on the continent. Although the turn to multipartism has been hailed as a lever for both instant and long-term democratization by some analysts (Lindberg 2006), others have highlighted ways in which political features of the old systems have persisted into the current era, often helping to shore up the positions of long-term incumbents (e.g. Bratton 1998; Lynch and Crawford 2011). In the last decade, there has been a great deal of research on some long-standing electoral practices that aim at manipulating voter preferences (such as vote buying, clientelism and media censorship) or the actual vote (e.g. tabulation fraud or ballot stuffing) (Schedler 2002, Birch 2011). Less attention has focused on the design of electoral systems and on rules that structure processes and outcomes in more persistent and systemic ways.

This paper focuses on a specific form of bias in electoral system design: rural-favoring malapportionment in Single Member District (SMD) systems. We study this phenomenon in eight countries in Anglophone Sub-Saharan Africa using an original dataset, one of the very first to compare the structure and characteristics of constituency-level representation across African countries. Election monitoring reports from around Africa have frequently pointed out that unequal representation due to malapportionment violates the principle of ‘one person one vote,’

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and a seminal study by Barkan et al. 2006, showed the importance of malapportionment for Kenyan elections in the 1990s. We, however, lack systematic comparative research on the magnitude of electoral malapportionment in Africa, its persistence over time, and electoral consequences. This paper addresses this important gap in our understanding of African political systems.

In identifying the extent of malapportionment and analyzing the rural bias therein, the paper provides clear evidence that overturns a long-standing misconception about the structure and functioning of African political systems: it rebuts the widely held and often repeated belief that African regimes of the one-party era relied heavily on urban bases of political support while ignoring the rural areas (Herbst 2000; Bates 2007). Extensive discussions of urban basis in 1960-1980s macroeconomic policy influenced political scientists greatly, gradually leading many to argue -- inferring from the interest group theory of politics -- that urban bias in policy outcomes was caused by urban-bias in rulers' bases of electoral support. Van de Walle (2001:26) has remarked upon this inferential slip in political analysis. Others focused not on the electoral connection per se, but on urban citizens’ capacity to organize collectively to threaten authoritarian rulers. They took the urban policy bias as evidence that African governments made policy decisions in response to their fear of organized urban groups’ capacity to protest and riot. Cheap imports and low food prices kept urban populations quiet, while rural populations — defined in these theories as atomized, disorganized, and lacking capacity for collective action — could be patently ignored.

It is indeed true that pre-1990 exchange rate and food price policies strongly favored urbanites (as the original "urban bias" theorists pointed out). Yet the inference that rulers'
political strongholds were *urban* was patently incorrect, as was the idea that governments could and did ignore the politically-inert rural areas. Our data show that electoral systems that prevailed in the 1960s, 1970s, and 1980s apportioned disproportionate electoral weight to rural constituencies and created a systematic bias in the African electoral systems.

Using evidence from the structure and workings of electoral systems, this paper takes the first steps in turning this longstanding and misleading conception of "urban political bias" on its strength of the cities. There was systemic rural bias in electoral representation in these *ancien régime* (pre-Third Wave) governments' institutional and popular bases of political support. With the inauguration of multiparty elections in the 1990s, the *ancien régime* ruling parties had every incentive to maintain this general apportionment structure. Rural voters were expected to continue to support the long-seated incumbents, and they did so by overwhelming margins. The rural constituencies helped sustain many of these *ancien régime* parties in power well into the multiparty era as opposition parties coalesced in the cities. When urban-based opposition parties *have* won elections and gained power at the national level, some of them have come over time to lean more and more on rural bases of electoral support.

Our dataset of constituency-level election data for eight African countries suggests that levels of electoral malapportionment in Africa are high by international standards and have not decreased since the return to multiparty competition in the early 1990s. Four of the eight countries in our sample have experienced electoral turnover since the 1990s, but even in these countries (two of which have undertaken constituency demarcation exercises), malapportionment still favors rural districts to the same extent. These rural constituencies provided the *ancien régime* ruling parties and the long-time incumbents who have remained in power with their most reliable bases of electoral support, and there is evidence that at least some newcomer parties also have incentives to magnify the electoral weight of rural constituencies. Moreover, the multiparty politics and the introduction of more checks and balances have to some extent limited the executive’s ability to influence demarcation, making pre-multiparty biases remarkably stable.
The argument is presented in five steps. First, we discuss electoral institutions under the one-party regimes of the pre-democratization era. In Africa as in much of the rest of the world, elections mattered in politics, even when multiparty competition was suppressed. Second, we introduce our data set, which we believe offers possibilities for significant advances in understanding spatial and socio-economic structure in national voting patterns in Africa. Third, for the eight countries in our data set, we document the extent of malapportionment and how it evolved since 1990. Fourth, we demonstrate malapportionment in the bias against the largest cities in our eight countries in the 2000s, and track change over time (since 1990) in the extent to which incumbents have drawn disproportionately on rural voters to win elections. Fifth, focusing on the period since 1990, we correlate electoral district size with the constituency characteristics and voting patterns for each country. We compare the results for the first post-1990 multiparty election for which we have data, and the last multiparty election for which we have data. The conclusion discusses three broad implications of these findings for the study of African politics and for understanding electoral dynamics in new democracies.

I. Elections under single- and dominant-party rule

A wave of research on elections in authoritarian regimes has shown how and why elections matter, even in the absence of multiparty competition, and how non-democratic rulers can use elections and electoral systems to gain political advantages (Lust-Okar 2005; Brownlee 2007; Ghandi 2008, Greene 2007; Levitsky and Way 2010; Pitcher, 2012). A premise of this literature is that even dictators must invest scarce resources in building and maintaining power (Nye 1997; Bueno de Mesquita et al. 2003; 2005; Azam 2001; Haber 2006). Successful non-democratic rulers can use political parties and elections to incorporate constituencies into stable ruling blocs or coalitions, gain information about subjects' demands and capabilities, economize on use of coercion, lower the cost of side payments and pay offs, and impede the ability of opposition

These strategies were employed by the authoritarian and dominant party regimes in Africa in the 1960s, 1970s, and 1980s, just as they were in the Middle East and Latin America. In the first three decades after independence from colonial rule, most civilian governments in Africa maintained elected legislatures -- rulers sought to use and control them. Under one-party regimes, rulers sought to take advantage of the legitimating potential of elections. Many used competitive legislative primaries as a device for elite monitoring, recruitment, and turn-over (Hyden and Leys 1972). Party hierarchies organized relations of patron and clientelism, rallied constituencies, and gave rulers control over territorial administration. In countries in which rural populations made up anywhere from 60 to 90% of the national total, governments depended heavily on rural acquiescence and compliance, and on extending the administrative and political reach of the party-state in export-producing regions, rural peripheries, zones of potential dissidence and unrest, and border zones. They invested resources in organizing rural constituencies into hierarchically-ordered political machines and party structures, and mobilized key constituencies to turn-out at election time.

The oft-repeated assertion that rural populations are atomized, unorganized and incapable of collective action is belied by the history of rural uprisings, revolts, unrest, and political mobilization under colonial rule. African governments that came to power in the 1960s used party-building, state-building, and rural policking -- including the patronage and clientelism that has been the hallmark of state-society relations in rural Africa since the 1960s -- to demobilize and coopt rural populations (Boone 2013 forthcoming). A large literature from the 1960s and 1970s shows how non-democratic rulers used rural clientelism and local party-state institutions to undercut the political solidarities and oppositional tendencies that existed in peasant societies in

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Africa, and that could be turned against the center. This was one of the main points of Bates' 1981 analysis of machine politics in the rural areas of Kenya (a country with a brutal and bitter history of rural insurgency in the 1950s) in *Politics and Market in Tropical Africa.*

Scholars of African politics have stressed the "ethnic" or "ethno-regional" character of rulers' mobilized bases of electoral support, but they have often overlooked the spatial, social, and institutional dimensions of this phenomenon. These spatial and institutional dimensions are what we seek to highlight in this paper: these voting blocs were rural, and they were organized within overlapping patron-client, administrative, economic, and party institutions (Boone 2003a, 2003b, 2007, forthcoming). Election-driven distributive politics renewed rulers' links with voters and constituencies in rural constituencies (Bates 1981; Bratton and van de Walle 1996; Mueller 1984). Party cells and local organizing committees monitored possible opposition currents. Citizenship rules and voter registration rules structured electorates in ways that reinforced hierarchy in local political arenas and fortified the advantages of brokers and citizen groups liked to ruling parties.

Consistent and sustained investment in institution-building strategies are evidence of the large extent to which Africa's one-party regimes depended on rural acquiescence to taxation and political subordination to the center, rural populations' public displays of support, and rural-based ideologies and appeals for political legitimization. Rural constituencies were critical building blocks in the postcolonial "politics of distribution" -- much of it rural-to-rural redistribution -- that underpinned ethno-regional alliances, stabilized regimes, and rendered countries governable (Azam 2001, Boone 2007). Villages, sous-prefectures, districts, Local Government Areas, and settlement schemes often represented captive constituencies: rural strongmen owed their positions and power to rulers at the center of the political system, and rural voters were and are less

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5 There are a few exceptions like Congo Brazzaville and Gabon that did not depend on smallholder export crop production for an important share of their foreign exchange.
autonomous and easier to monitor. It is likely that incumbents were generally more willing, more able, and more successful at making credible "social contracts" with rural voters than they were with urban clienteles (Keefer 2004, Nugent 2010).

Rural institution building, including the presence of the party-state and patron-client hierarchies in the rural areas, give most of Africa's single-party and authoritarian regimes secure political strongholds and support bases in the rural areas. This allowed most governments in the one-party era to downplay the political demands of the cities, and to offset the weight of organized opposition, most of it emanating from the cities. The oppositional character of Africa's cities has been a constant feature of political systems from the dawn of modern party politics in the 1940s and 1950s right through to the present day (Cooper 2002, LeBas 2011). In the postcolonial period, civil society activism has been a largely urban phenomenon, largely for reasons articulated by Mamdani (1996). As Bates (1981) pointed out in his early analyses of urban bias in macroeconomic policies of the 1960s and 1970s, the main threats to postcolonial incumbents were urban based trade union movements, urban strikes, demonstrations, and uprisings. And indeed, the pro-democracy (anti-incumbent) movements of the 1990s were almost exclusively urban-based, as Bratton and van de Walle (2007) pointed out.

Control over rural majorities provided the ballast that allowed many ruling parties to withstand the forces of urban opposition in the early postcolonial decades, and that coalesced into major opposition movements in the 1990s. In Senegal, for example, the ruling party sustained repeated waves of assault by urban-based opposition movements in the 1980s and 1990s, succumbing only when it lost control of a major rural stronghold, the groundnut basin. Ancien regime parties that have remained in power, such as Tanzania's CCM, cultivate and rely upon rural bases of electoral support. Meanwhile, some of the "newcomer regimes" of the multiparty era -- including the MMD in Zambia and Abdoulaye Wade's PDS government in Senegal, both of which came to power on a wave of mobilized urban voters (in 1991 and 2000, respectively) -- lost urbanites' confidence over time, and eventually fell-back on the electoral support of rural voters. In
Zambia's 2006 elections, the ruling MMD lost almost every urban parliamentary seat, and all seats in the highly urbanized Copperbelt region. The opposition Patriotic Front won 25% of the national vote, most urban seats and every constituency in the Copperbelt (Larmer and Fraser, 2007: 612). In local elections in Senegal in 2009, all major cities in Senegal (except Ziguinchor) elected opposition candidates.

In the 1990s and 2000s, discussions of how inherited electoral systems would affect the politics of multipartism focused mostly on national-level institutional features and aggregates, such as the question of the effects of SMD versus PR systems (Posner 2005). With the exception of Barkan's work on rural representation, little attention was devoted to the spatially uneven (urban-rural) effects of inherited electoral rules on representation and electoral dynamics, or to the institutions that structure politics at the sub-national level. Since the early 2000s -- with the growing availability of public opinion and polling data, the rising interest in behavior and experiments focusing on voter preferences and perceptions, and a new wave of election studies focused on balloting, monitoring, and vote aggregation -- there has been even less focus on institutional factors. Studies of election dynamics have moved away from institutional questions. Much of the newer work focuses on electoral practices and dynamics, including patterns of campaign financing, access to media, election monitoring, and the workings of electoral commissions. Structural and institutional questions, including questions focused on electoral system design and institutional legacies, has not been central to discussions.

Recent work based on public opinion surveys has noticed that rural voters often support incumbents. Harding (2010), Conroy-Krutz (forthcoming) and others have suggested that this as a radical departure from the "urban bias" of the pre-democratic era. These interpretations,

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6 Literature on decentralization was a partial exception.

7 Rural support for many of today's governments is often taken as the political pay-off of the Structural Adjustment Policies (SAPs) of the late 1980s and 1990s. The SAPs ended some
however, are based on a shaky theory of "political urban bias" in this earlier period. In this paper, we work to place the analysis on surer footing by providing evidence of longstanding connections between African governments and rural voters that are embedded in the design of electoral systems at the sub-national level, and by identifying how some of the ways in which these institutional legacies structure the political playing field in the multiparty era.

The eight country, constituency-level data set that we have assembled offers clear evidence of the rural-favoring malapportionment that is embedded in electoral systems inherited from the 1960s, 1970s, and 1980s. It shows that with the introduction of multipartism, most of the longstanding rulers (ie., the political parties of the *ancien regime*) drew heavily on rural support bases to gather votes. Under multipartism, victories of newcomer parties, civil society groups, and opposition parties have been, to a large extent, victories of the cities. Triumph in national-level elections comes when the urban-based political opposition has been able to harness oppositional sentiment in key regional (predominantly rural) constituencies. The record suggests, however, that once in office, the newcomer parties have had incentives of their own to cultivate reliable rural bases of political support. The weight of the rural areas exerts a strong pull on political dynamics in African countries.

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sources of urban bias in policy by devaluing currencies, dismantling the agricultural marketing boards which taxed farmers, and liberalizing the marketing of agricultural imports. Yet the suggestion that post-1990 government spending and investment priorities now favor the rural areas is probably generally incorrect. Eastwood and Lipton (2000), for example, argued that price liberalization reduced price distortions against tradeables, but saw this as a very narrow "pricist" point that missed the bigger picture of continuing bias in government spending policies against the rural areas. See also Jones and Corbridge 2010: 6 inter alia; and Aubyan 2002 (on Ghana) in Cowen and Laasko, 2002:94.
II. Constituency Level Electoral Data Set

This paper uses a new dataset of constituency level lower-house parliamentary election results, registered voters, and constituency characteristics over the 1991-2010 period in eight African countries, Botswana, the Gambia, Ghana, Kenya, Malawi, Tanzania, Zambia and Zimbabwe, to study patterns of electoral support and representation. The case selection is made based on the electoral competitiveness of the countries, their experience of SMD elections and the availability of data. All countries in the dataset utilize SMD elections and have exhibited at least a minimal degree of competitiveness for two or more consecutive elections. We have not included elections featuring boycotts from major opposition parties (i.e. the Gambia 2002, Ghana 1992 and Zimbabwe 1995). For five out of the eight countries included, the dataset covers all non-boycotted elections in the 1990s and 2000s. Fridy (2009) notes that several African electoral commissions have historically failed to present sufficiently disaggregated election data, and this is true for some of the countries in our sample. In our dataset, information is missing from the elections in Tanzania 1995, Zimbabwe 2000 and the Gambia 1992. For these elections it has not been possible to locate information on the number of registered voters for every constituency.8

In addition to electoral data on the partisan breakdown of the vote and the number of registered voters per constituency, we also collected data on constituency characteristics for our multivariate analysis. In our models, we control for the urban/rural status of a constituency, recognizing constituencies located within the parameters of major cities as urban.9 We also control for other additional factors.

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8 In a few cases the number of registered voters have been missing for some constituencies in our sources. At these instances, we have imputed the number of registered voters from the last election if available.

9 We have relied on the geographical location of constituencies to determine urbanness. All constituencies located within the parameters of major cities have been coded as urban. All national and regional capitals with at least 20,000 citizens have been considered major cities, together with all other top 10-cities with a population of at least 20,000. With this
factors that might affect the predictability and controllability of a constituency. Constituencies inhabited by ethnic homogenous populations and communities with low literary rates should be easier to control and *ancien* regimes might be inclined to assign such constituencies greater electoral weight (Brusco et al. 2004). Hence, we control for the level of ethnic fragmentation in the province (region) in which the constituency is located,\(^{10}\) and literacy rates in the province (region) in which the constituency is located.\(^{11}\) Unfortunately, neither the ethnic fractionalization nor the literacy data is available on the constituency level. Although such data would undoubtedly be preferable, given that variations exist within regions, we believe that as a first cut, the regional data serves as a good proxy for district level demographic and socio-economic characteristics. Similarly, there would be incentives to magnify the weight of “safe seats” with low levels of competition. We therefore include a control for the difference in vote share received by the winning and runner-up candidate in every constituency.

To the best of our knowledge, the dataset represents the most extensive statistical source of constituency level election results and registered voters in African SMD systems. Most of the operationalization we use a rather wide definition of urban constituencies. An alternative, and perhaps preferable operationalization, would have been to use population density of each constituency. This operationalization would, however, require information on the area of each constituency. This information is generally not available. Data on city population is taken from each countries national bureau of statistics, available and collected at www.citypopulation.de.\(^{10}\) To account for ethnic heterogeneity we have used data on regional level ethnic fragmentation from Alesina and Zhuravskaya (2011). Ethnic fragmentation is calculated using the Herfindahl index, representing the probability that two randomly drawn individuals in a certain region belongs to different ethnic groups. Alesina and Zhuravskaya have extracted the data from the national census conducted in the country closest to the year 2000.\(^{11}\) To account for variations in socio-economic structures across constituencies we include the regional mean female and male literacy rate. The strength of this particular indicator is that comparable statistics is available over time in the Demographic and Health Survey (DHS) for all the countries in the data. For every election we have used information from the most proximate DHS, enabling variation over time.
data was gathered on a country-by-country basis from official accounts issued by the respective countries’ national election commissions. In some cases data has also been found in election monitoring reports or national media.\textsuperscript{12}

III. Malapportionment in African SMD systems

Malapportionment is an unequal assignment of seats so that that the votes of some citizens’ weight more than others. By definition, it runs counter to the democratic principle of ‘one person one vote,’ but it can be used to offset other representation-distorting features of a national electoral system, or to institutionalize power-sharing bargains between population groups of different sizes.\textsuperscript{13} Malapportionment can create a strong bias in the electoral system if it systematically favors some groups over others.

A decade ago, Samuel and Snyder (2001) found that some of the world’s most malapportioned political systems were on the African continent. Samuel and Snyder used data from the 1990s (i.e. the beginning of Africa's multiparty era), and did not study changes in levels of malapportionment in Africa over time. In this analysis we look at how patterns of malapportionment have changed over time and the characteristics of the constituencies that have been favored or disfavored by malapportionment. Most countries have had at least one

\textsuperscript{12} We also thank some individuals for providing some data: Jørgen Elklitt, John Ishiyama

\textsuperscript{13} A striking contemporary case is the US Senate, which gives all states, large or small in population, two senators. Malapportionment in US Congressional seats was significant until the 1960s when the Supreme Court took a clear stand against intrastate malapportionment (Ladewig and Jansinski 2008). In the UK, more weight has been given to voters in Scotland and Wales, hence creating some advantage for the Labour Party (Johnston et al. 2012). Nevertheless, in a comparative study by Samuel and Snyder (2001), the clearly highest levels of malapportionment were found on the African continent.
demarcation exercise since their first multiparty elections (see table 2), and several African countries have had alternation in power over the course of this period.

To measure malapportionment we rely on the formula introduced by Samuel and Snyder:

(1) \[ \text{MAL} = (1/2) \sum |s_i - v_i| \]

Where \( s-v \) denotes the absolute value of the difference between the percentage of seats and percentage of registered voters for constituency \( i \). The malapportionment index shows the percentage of seats that are allocated to constituencies that would not receive those seats if there were no malapportionment. A score of 0 would indicate perfectly equal representation.\(^{14}\) Table 1 shows levels of malapportionment in each of our eight countries, and how these have changed over time.

| table 1, Malapportionment Index over time, about here |

These descriptive statistics show that the level of malapportionment in Africa is high. The mean malapportionment in Samuel and Snyder’s sample of 78 countries worldwide was .06 (Samuel and Snyder 2001: 659). The mean malapportionment for the eight countries in our sample (for the last election) is over twice that level at .17. Only one country in our data set, Zimbabwe, exhibits lower levels of malapportionment than the mean in Samuel and Snyder’s global study. Botswana displays levels of malapportionment relatively close to the global mean. The six remaining countries in our sample have remarkably high levels of malapportionment by global standards.

\(^{14}\) In practice this score would be unthinkable in electoral systems with more than one electoral district.
Tanzania had the highest level of malapportionment (.28) in its 2010 election, followed by Gambia in 2007 (.24). The extreme level of malapportionment in Tanzania is partly due to the constitutionally guaranteed representation for the islands of Zanzibar and Pemba.\footnote{According to the Zanzibar constitution of 1984 (Section 120(1)), Zanzibar should have no less than 40 and no more than 55 constituencies of approximately equal size.} If we exclude Zanzibar and Pemba, the Tanzania index is still high at .19 for the 2010 election.

High levels of malapportionment have persisted over time. We can compare the patterns of change in country levels of malapportionment in table 1 with the timing of demarcation exercises in table 2. It is clear that that post-1990s demarcation exercises have not done much to reduce levels of malapportionment and without ambitious demarcation exercises malapportionemnt is likely to increase into the future due to ongoing processes of urbanization.

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\text{Table 2, demarcation exercises, about here}\]

Districting is by its very nature a highly politicized practice as it has the potential to severely tilt the electoral playing field in favor of one specific political player. Apart from the strategy of systematic malapportionemnt, gerrymandering is often used as a tool to create systematic electoral biases. Gerrymandering is the careful use of districting (demarcation) to maximize a party’s electoral performance.\footnote{There is a significant literature in American political science on the strategic use of districting as a tool for achieving partisan electoral advantage, and two of these tools --- malapportionment and gerrymandering -- are the subjects of large literatures (e.g. Gelman and King 1994).} Johnston (2002) separates between stacked gerrymandering, where constituencies are drawn so that the opposing party wins a small number of constituencies with a large majority in each one and cracked gerrymandering, where a party’s purpose is to
design constituencies so that it can win narrow majorities in a high number of constituencies. Although gerrymandering and malapportionment are possible in both SMD and PR electoral systems (if the number of constituencies > 1), the potential benefits of such strategies are, in general, greater under SMD where more constituencies have to be divided.\textsuperscript{17} Besides the potential benefits of increasing the electoral weight for loyal constituencies (and diluting the electoral weight of opponents), demarcation can also be used to distribute patronage and extend the dominant party’s ruling coalition by creating more government offices for local rural elites (Green 2010).

On the eve of the return to multipartyism in the 1990s, all countries in our sample were divided into electoral constituencies that were established in the earlier era of one-party or dominant-party rule.\textsuperscript{18} (These systems were, in turn, built on the basis of colonial demarcations. The colonial demarcations were used in the multiparty elections that chose elected African representatives in the 1950s, and then the first post-independence legislators and presidents.) With the return to multiparty competition after 1990, most of the sitting governments expanded the number of seats in parliament in anticipation of the first round of multiparty legislative elections. These demarcation exercises often served to accentuate or magnify existing biases in apportionment. For instance, in the run up to the 1991 Zambia election, the electoral commission decided to concentrate its efforts on creating new constituencies in remote rural areas. As a consequence, all the new 25 Zambian constituencies were allocated to rural areas, reaffirming the already strong rural bias in apportionment. After the introduction of multipartyism in general and the decline of one-party dominance in particular, demarcation has become more difficult even for

\textsuperscript{17} Samuel and Snyder (2001) shows that the level of malapportionment is significantly higher in countries with SMD elections.

\textsuperscript{18} The basis for the original constituency boundaries varies across countries. For example, in Kenya the original 1962 Boundary Commission established constituency lines to achieve intra-constituency ethnic homogeneity (Fox 1996: 597). By contrast, when the 1962 Boundary Commission in Tanzania drew the original constituency lines, the aim was to avoid ethnic concentration (Harris 1967:24).
parties controlling the executive. The Kenyan Constitutional Court ruled in 2002 that the constituencies prevailing in the 1990s violated the constitutional provision of equal representation. Even so, no redistricting was done between the 2002 and 2007 elections. In 2007 a draft proposal from the Electoral Commission to create new constituencies was rejected by parliament. A similar report was rejected by the Malawian parliament in 2009, where many incumbent MPs feared that altered electoral boundaries could harm their chances for reelection in the upcoming election. In Zambia, an increase in the number of constituencies requires a constitutional amendment and a two-thirds majority in parliament. A proposal to increase the number of constituencies was rejected along with the rest of the draft constitution in 2011.

Although checks and balances increased with the reintroduction of multipartyism, incumbent governments have still often been accused of increasing the weight of their own electoral strongholds. After the 1994 turnover in Malawi, the newly elected UDF party was accused by the opposition of pressuring the Electoral Commission to increase the number of constituencies in the Southern region, where the UDF derived most of its support (Khembo 2004:71). It is widely held that President Moi was effective in gaming the demarcation process after the introduction of multipartism. By using his discretionary powers to create new administrational districts in rural Kenya in the run-up to the 1997 election, the president forced the Electoral Commission to create new rural constituencies matching the newly created administrative units (IED 1998:11). Similar accusations are currently being made against incumbent president Michael Sata in Zambia, where the president has created a large number of new districts by presidential decree. Since every district normally has at least one constituency and constituencies are not supposed to cross district boundaries, the creation of these new districts

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19 Interview with Ragson Kamuna Chirwa, MP, Chikwawa East Constituency, 2013-07-04.

are likely to have clear consequences for upcoming delimitation exercises. The ZANU-PF government in Zimbabwe has also been frequently accused of gerrymandering, both to handle intra-party and inter-party competition (Laakso 2002). Before the 2008 parliamentary election, the ZANU-PF regime merged a number of rural and urban constituencies to offset the weight of the opposition, which had strong support in the capital of Harare. ZANU-PF rural voters were incorporated into what had been predominantly urban constituencies, diluting the electoral strength of the anti-ZANU-PF voters. This is a clear example of cracked gerrymandering (Chigora and Nciizah 2007).

High levels of malapportionment in Africa are especially striking given the fact that equal representation across constituencies is constitutionally demanded in most of the countries under scrutiny. The 1969 Kenyan constitution (in place until 2010) dictated that ‘All constituencies shall contain as nearly equal numbers of inhabitants as appears to the Commission to be reasonably practicable.’ (Section 43:3). Similar provisions exist in the Botswana constitution of 1966 (Chapter 1 Section 64:1), Malawi constitution of 1995 (Section 73:2a), the Zambia constitution of 1991 (Section 77:1) and the Zimbabwe constitution of 1979 (Section 60:3). Similarly, the Ghanaian constitution of 1992 (Section 42:3) states that ‘The boundaries of each constituency shall be such that the number of inhabitants, is as nearly as possible, equal to the population quota.’ Nevertheless, the level of malapportionment in Ghana remains high, in spite of a major demarcation exercise in 2003.

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21 Interview with Brown Kasaro, Deputy Director-Electoral Commission of Zambia, 2013-07-22.

22 However, the practice of gerrymandering is less useful for incumbents if voters are geographically segregated along partisan lines and constituencies are nested in larger geographical subdivisions (e.g. districts). In Africa, where parties often mobilize voters based on ethnic or regional identity (e.g. Posner 2005), there is hence a limit to the usefulness of gerrymandering as an electoral strategy.
Although most constitutions embrace the principle of equal representation, they also grant permission for the electoral commissions to depart from this principle to take into account factors such as population density, expected population development and ease of communications. Moreover, constituency boundaries are often adjusted to match boundaries for traditional authorities and higher administrative units (such as districts). This can give electoral commissions considerable latitude in taking factors other than equal representation into account in electoral districting. They are exposed to political pressures and vested interests of partisan and other political players, opening the door to intense politicking around electoral demarcation.

IV. Malapportionment and rural bias

For each country in our sample, Table 3 compares the average size of principal-city (in most countries, the capital city) constituencies to the average constituency size for the country as a whole. The data is from the latest elections of our dataset.

[Table 3, urban vs. rural constituency size, about here]

Principal cities have been disadvantaged in Africa’s SMD electoral systems, and the magnitude of the difference between the principal cities and the rest of the country is striking. In Gambia, Ghana, and Malawi, the average constituencies in the principle cities are approximately twice the size of the national average. In Kenya and Zambia, the ratio is approximately 2.5. The widest

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23 In, for instance, Malawi, no constituency contains more than two traditional authorities.

24 Barkan et al. (2006) provide a nice illustration of this rural overrepresentation in Kenya.
differences are found in Tanzania. The average constituency in Dar es Salaam is as much as 3.5 times the size of the average Tanzanian constituency. These severe biases against voters in the national capitals have clear consequences for electoral dynamics. Only two countries, Botswana and Zimbabwe, show a small variation in the size of constituencies in the capitals and the rest of the country. In Botswana, the Electoral Commission has been successful in avoiding malapportionment by the strict use of the population quota and frequent demarcations based on fresh censuses (Maudeni and Balule 2004: 37). In Zimbabwe, although the data from the most recent election do not show a large difference between the size of the electoral constituencies in Harare and the rest of the country, the government has indeed attempted to dilute the electoral challenge mounted by urban voters by merging urban and rural constituencies (Chigora and Nciizah 2007), as noted above.

[Figure 1 about here]

Figure 1 shows the share of urban and rural constituencies won by the incumbent party in the first election recorded in our dataset. There are only two cases, Gambia and Tanzania, where the incumbent party was as successful in the urban areas as they were in the rural constituencies. In Tanzania, the highly dominant CCM party was able to win almost all constituencies in both urban and rural locations. However, the average victory margin was larger in rural (16%) than urban constituencies (10%). In Gambia, the incumbent party won a clear majority of the seats in both the urban and rural areas. In all other countries the incumbent fared significantly better in rural constituencies. In Zimbabwe and Botswana, the tendency was very clear. Zanu-PF won over 80% of the rural constituencies in the 2005 election. In Kenya and Ghana the incumbent parties would have lost their parliamentary majorities if the entire countries had voted like the urban areas (Throup and Hornsby 1998). In Malawi, the incumbent MCP would have been much closer to getting reelected if they would have managed to win as many urban as rural seats. The Kaunda
regime managed the transformation to multipartyism very poorly and was only able to win 25 seats in the 1991 election, only one of these seats were urban. The patterns observed above shows how the *ancien regimes* relied heavily on rural areas, whereas the opposition parties entering into multipartyism were more successful in the cities. These results shed light on the origins of the rural biases in today's electoral systems. To the extent that rural bias in electoral apportionment is the product of rulers' strategic institutional choices, this bias appears to be a product of the strategic choices of the *ancien regime parties* that held power in the 1970s and 1980s. These parties went into the transition from one-party to multiparty rule with electoral systems that strongly magnified the weight of the rural areas in the legislative contests.

[Figure 2 about here]

In the electoral turnovers in Zambia in 1991, Malawi 1994, Ghana 2000 and Kenya 2002, long-time incumbents were ousted by parties with strong urban support bases. Figure 2 shows the development in urban/rural incumbent support for the countries in the sample that have experienced turnovers. The dot on the lines represents the incumbent support in the first election after turnover (i.e. with a newcomer regime in power). Interestingly, we clearly see how the support basis of the incumbent regime changed in all these countries after their first alternations. In Ghana, the NPP regime that was reelected in 2004 drew on a much more urban appeal than the *ancien* NDC government (Lindberg and Morrison 2005). In Kenya the PNU government was not predominantly supported by the rural constituencies. The support base of the newly elected governments in Malawi and Zambia was also much more urban than their predecessors in their first reelection.

Where newcomer regimes have come to power, they have inherited electoral systems that are malapportioned in favor of the rural areas. Their geographic bases of electoral support,
however, are very different from those of the old regimes, and much more urban. When the challengers have won elections, the have done so in spite of rural basis in electoral apportionment. However, we also see some evidence suggesting changed patterns of support for newcomer regimes in the second election after alternation. In Ghana, NPP lost some of its urban support in the 2006 election. More notably, the Zambian and Malawian newcomer regimes developed a much more rural base over the course of their tenure.

V. Multivariate analysis of constituency characteristics

As the descriptive analysis above made clear, malapportionment in favor of rural constituencies (against the main urban areas) is a prominent and persistent feature of the African SMD electoral systems in our study. So far, the analysis of malapportionment has been confined to the macro level. In this section we ask how electoral district size correlate with the other constituency characteristics, and with constituency-level voting patterns. We also ask how patterns of apportionment and potential biases have developed over time.

To study the patterns in unequal representation we introduce a multivariate analysis of constituency size (number of registered voters) below. Our units of analysis are constituencies grouped into countries. Since there is a natural variation in the average constituency size across countries (due to varying size of legislatures and population), we estimate a country-fixed effect model. Above, we showed how the electoral support of the newcomer regimes differs quite

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25 This model specification is preferable to a random effects model, since we have more observations per unit (constituencies) than units (countries). Moreover, a Hausman (1978) test reveals significant correlation between the unit effects and the covariates in the model (Clark and Linzer 2012).
substantially from that of the *ancien* regimes. We also showed how the *ancien* regimes used their discretionary powers to demarcate new constituencies during the era of one-partyism. We would, hence, expect that the patterns of apportionment would favor the incumbent in the turn to multipartyism. That is, we would expect that constituencies that are easily controllable and loyal to the incumbent were smaller on average (in terms of registered voters). Similarly, we also hypothesize that rural and uncompetitive constituencies with large winning margins were smaller than more competitive districts. To test these hypotheses, we below show a model of constituency size, with data from the first election for every country in our dataset. For three countries, the Gambia, Tanzania and Zimbabwe, we are missing data on some of the earlier elections. This problem is, however, mitigated by the fact that none of these countries have experienced any turnovers. Our main model, Model 1, includes 6 of the 8 countries in the dataset. For reasons that will be explained later, model 2 excludes the Tanzanian constituencies. Since data on regional ethnic fractionalization and literacy is missing for Botswana and Gambia, we also introduce model 3, which omits these variables, enabling us to present an analysis of the full sample. Finally, model 4 excludes the control for urbanness, to see how the effect of government support changes when not controlling for the fact that incumbent *ancien* regimes were stronger in these overrepresented rural areas.

Table 4 clearly shows that the patterns of over- and under-representation were not random in Africa’s SMD elections at the introduction of multipartyism. Although the coefficient for government support is in the expected direction there is no significant relationship between this

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variable and constituency size in model 1. These results are, however, partly driven by the rather specific Tanzanian case. In Tanzania the islands of Zanzibar and Pemba have rather distinctive patterns. In Zanzibar in the 1990s (and today), electoral constituencies are both small and oppositional. Their size is the intentional effect of the 1964 political deal designed to magnify their weight the future United Republic of Tanzania, which united the small islands of Zanzibar and Pemba with the much more populous Tanganyika. In model 2 we, hence, exclude the Tanzanian constituencies and the coefficient becomes significant and negative, suggesting that apportionment did indeed favor the ruling party at the introduction of multipartyism.

We also find support for the idea that easily controllable constituencies were favored by structures of apportionment. Throughout model 1-4 higher levels of literacy is significantly related to larger constituencies. We also find support (in model 2-4) for the hypothesis that noncompetitive constituencies have been favored in apportionment (model 2 and 3). Although African politics since multipartyism has become more competitive, dominant parties have cultivated geographically restricted bases of support. Political actors (both government and opposition) can be expected to advocate for smaller constituencies in their own geographical strongholds, leaving the truly competitive constituencies at the losing end of electoral demarcation.

The clearest result in table 4 is the importance of urbanness for constituency size. The results show that urban constituencies were significantly larger than rural constituencies at the introduction of multipartyism, even when controlling for these other factors. The significant relationship between the urban/rural status of the constituency and its size is hardly surprising.

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27 The story of their oppositional character in the 1990s and 2000s is one that we will not explore here.

28 Not necessarily, though, and not evenly across space. Wantchekon (2003) reported that of Benin's 84 electoral districts in 1996-2001, 78 were non-competitive.
given the descriptive statistics shown earlier in this paper. In the models run above we use the broader definition of “urban”, including all major cities. If we run the models only classifying the capital cities as “urban”, the coefficient becomes even larger. Earlier we emphasize how the ancien regimes had clear incentives to sustain rural favoring malapportionement. These rural regions were the bastion of incumbent support during the one-party era and were expected to remain loyal to the incumbent when making the turn to multipartyism. Given the relationship between the urban/rural status of a constituency and its propensity of supporting the incumbent regime, we would expect an even larger coefficient associated with government support if not controlling for urbanness. In model 4 we replicate model 1, but exclude the urban variable. According to our expectations we do indeed see how the coefficient for incumbent support becomes larger without this control. These results indicate that there was a general favoring of constituencies supporting the incumbent at the introduction of multipartyism and that this bias was further enforced by assigning greater weight to the rural areas that were overwhelmingly supportive of the incumbent party.

[Table 5 about here]

Table 4 showed the patterns of apportionment in the beginning of our observed time period. Instead of studying the first elections of our sample the models in table 5 include the most recent elections in our time series. The purpose of the models in table 5 is to see whether the patterns of apportionment have changed over time through the demarcation exercises that took place in most of the countries in the sample, during the 1990s and 2000s. Moreover, four of the countries in the sample have had alternations in power. Hence, The models in table 5 are a way to study whether

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29 See data section.
newcomer regimes have been successful in transforming old institutional biases that systematically favored the ancien regimes.

Interestingly, when looking at the latest election, rather than the first, the coefficient for the government variable is reversed and significant, showing that constituencies supporting the incumbent in these latest elections are actually significantly larger than those supporting the opposition (model 5). We can also see how the urban constituencies are still significantly larger than their rural counterparts. In fact, the coefficient for the urban variable is even larger in model 5 than in model 1 (showing the situation in the first election). The other coefficients that were significant in table 4 (relating to competitiveness, urbanness and literacy) do, however, remain significant and in the same direction. The results of model 5 suggests that the structures are remarkably constant in relation to those at the introduction of multipartyism, and that newcomer regimes have not been able to abolish the old institutional structures working to their disadvantage. These results are robust regardless if whether we use the full list of covariates (model 5) or the full sample (model 6). To further study the stickiness of these institutions, models 7 and 8 introduce a control for whether a constituency was won by the incumbent government (i.e. the ancien regime) in the first recorded election of our dataset. Models 7 and 8 show that these old ancien regime strongholds are still significantly smaller than constituencies that supported the opposition at the first election.

The analysis above has shown how urban constituencies have been continuously disfavored by apportionment throughout the studied time-period. The rural-bias of the electoral systems was one important component in biasing the system in favor of the ancien regimes at the turn to multipartyism. Although newcomer regimes in many of the countries in our sample rely on a more urban support base, these new regimes, controlled by more checks and balances, have not been able to alter the systematic bias in apportionment.
Conclusion

This paper shows that there is a long-standing rural bias in electoral institutions in eight Anglophone African countries. Our results are based on an analysis of constituency-level data, coded for constituency attributes and with constituency-level electoral results for parliamentary elections since the early or mid-1990s. The results show that the patterns of constituency demarcation magnified the electoral importance of rural voters in national systems. In the openings to multipartism, rural constituencies served as the trusted bastions of electoral support for incumbents as they braced themselves against urban-based opposition movements. As Henri Maupeu (2003: 159) said of Kenya, the KANU regime governed "against the city." In the transitions to multipartism, rural voters became more significant than ever as a source of incumbent advantage for the ancien régime parties. Most of the old dominant parties fell-back on their rural electoral strongholds as they faced organized waves of challenge from the cities.

The phenomenon of rural political and electoral support for less-than-democratic rulers is not unique to Africa. Lipset and Rokkan (1967) identified the urban/rural divide as one of the predominant cleavages structuring party competition in multiparty democracies. This divide remains one of the most prominent cleavages structuring party politics globally, in both developed and developing countries. Scheiner wrote of extreme "rural bias" in the electoral support bases of the LDP party in Japan (2006: 15). Joshua Tucker (2006) showed that throughout the former Soviet Union, the poorest and most rural areas remained the most loyal to ancien régime communist parties. Guillermo O'Donnell (1989) wrote eloquently of less-than-democratic rulers' strongholds over rural and peripheral "brown areas," which were barely touched by the return to democratic practices in the "blue areas" of the cities. Similar patterns are stark in parts of the Middle East. In Jordan, for example, analysts have long argued that the political base of Hashemite state is the rural "tribes" (Waldner 1999). In Latin America, too, similar patterns are longstanding and visible. In Mexico, the PRI was rooted in the rural ejidos.
and poor provinces of the south, all zones dominated by strongmen and political brokers linked the ruling party. Magaloni reported that in 1994 and 2000, you would be correct 90% of the time if you predicted that a campesino or "peasant" would vote for the ruling PRI. In these countries as in much of sub-Saharan Africa in the era of the one-party states, rulers used rural support and rural votes to counterbalance opposition-prone cities, and to isolate the unions, urban professionals, intellectuals, and the urban poor. More research on how such voting patterns coincide with institutional biases would be valuable for our understanding of dominant or one-party regimes.

This analysis has three broad implications for how we understand the political character of African states, and how they have been governed since the 1960s. First, the conventional wisdom that is often captured in the idea that the one party states were built upon a political "urban bias" while completely ignoring the inert rural areas is largely incorrect. In fact, to remain in power, African governments relied heavily on political control of the rural areas, cultivated rural acquiescence, and relied on rural strongholds as bastions of political and electoral support. The building of rural political institutions, including rural electoral institutions to discipline and mobilize rural voters, are critical state-building legacies of the one-party era.

Second, rural bias in electoral apportionment remains a strong feature of these SMD electoral systems. The systematic underrepresentation of Africa’s urbanites may emerge as a challenge to the legitimacy of the democratic systems, especially as levels of urbanization continue to increase. Rural bias may explain why the political impact of mobilized civil society in African

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30 This was largely a function of PRI partisan organization (clientelist networks) and the resulting dependence of these particular rural voters on government transfers and social services (esp. the Opportunidades Program (57% of rural voter say they have received benefits) and the Progressa Program (33% of rural voters have received benefits), compared to very low numbers for either among urban voters. (Beatriz Magaloni, UT, Spr. 2006).
urban areas has often been more muted than analysts had anticipated, and while some incumbents have experienced longevity that few would have predicted a decade or more ago.

Third, rural bias in representation will be consequential in many other ways, ranging from possibly creating or maintaining incentives for pro-smallholder agricultural policy to possibly reinforcing rulers’ incentives (including the incentives of newcomer parties that were hoisted into office by urban supporters) to invest in longstanding forms of rural political brokerage and electoral clientelism.31 Seriously examining the causes and consequences of these patterns of unequal representation should be a key concern for Africa-focused scholars and for African political activists and electoral authorities.

Growing pluralism in African political systems has reduced incumbents' unilateral prerogatives, even if it has not turned many African countries into liberal democracies. This pluralism is likely to intensify and accentuate the inherently political character of electoral demarcation processes. The general assessment of the 2003 demarcation in Ghana, for example, has been positive. The Electoral Commission appeared to be largely free from political pressure, and the outcome does not seem to have clearly benefitted the ruling NPP party (Smith 2011). This is a stark contrast to the demarcation performed in Ghana in 1992, where the Electoral Commission exhibited a low level of independence vis-a-vis the Rawlings regime (Aubyan 2002). Similarly, although important elements of the ruling coalition in Kenya wanted to increase the number of seats in parliament before the 2007 election, parliament voted against expanding the legislative assembly

31 Newcomer regimes often lack incentives to abolish incumbent advantages after winning power.

Most authoritarian institutions can be transferred between regimes and, hence, reduce newly elected regimes future electoral uncertainty (Wahman 2013). Some electoral institutions will favor the party in power regardless of party identity. For instance, the PDS party in Senegal, quickly abandoned its advocacy for a more proportional electoral system after winning power in the 2000 election (Mozaffar and Vengroff 2002).
This is an arena of African politics that may well prove to have a decisive impact on the character of electoral systems in the future, as well as one that will reward careful analysts with a wealth of new information about political power and political strategy in African contexts.
References


Chirwa, Ragson Kamuna, Interview, Blantyre, 2013-07-04.


Kasaro, Brown, Interview, Lusaka, 2013-07-24


Table 1: Malapportionment index

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Table 2: Demarcation from independence to last election in dataset

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Note: We have included all demarcation exercises occurring after independence and under the current electoral rules. Grey cells indicate that demarcation was executed under multiparty institutions. In cases where the exact date for the exercise is unknown, we have indicated the year for the first election using these new electoral boundaries.

32 First election without the “main roll” and “reserved roll” system.

33 First election without the “white roll” and “common roll” system, at this point Zimbabwe was already arranging multiparty elections.
Table 3: Registered voters in principle city electoral constituencies

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Figure 1: Share of urban and rural constituencies won by the incumbent in the first election

Figure 2: Urban and Rural Constituencies' Support for the Government in Countries without Electoral Turnovers

Note: Statistics represent the % of constituencies in each category (urban or rural) voting in support of the government in office at the time of the election. Circles represent the first election in a country after an electoral turnover (i.e. were the *ancien* regime has been replaced by a newcomer regime.)
Table 4: Country-fixed effect regression model on constituency size: first election in dataset

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*** p<.01 **p<.05 *p<.10

Table 5 Country-fixed effect regression model on constituency size: most recent election

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*** p<.01 **p<.05 *p<.10