Working Paper No. 103

TRIBALISM AS A MINIMAX-REGRET STRATEGY: EVIDENCE FROM VOTING IN THE 2007 KENYAN ELECTIONS

by Mwangi S. Kimenyi and Roxana Gutierrez Romero

A comparative series of national public attitude surveys on democracy, markets and civil society in Africa

Core Partners

Center for Democratic Development (CDD-Ghana)
95 Nortei Ababio Street, North Airport Residential Area
P.O. Box LG 404, Legon-Accra, Ghana
233 21 776 142 • fax: 233 21 763 028
www.cddghana.org

The Institute for Democracy in South Africa (IDASA)
P.O. Box 56950, Pretoria Arcadia, 0007, South Africa
27 12 392 0500 • fax: 27 12 320 2414/5
www.idasa.org.za

Institute for Empirical Research in Political Economy (IREEP)
Campus ENEAM Gbegamey 02 B.P. 372
Cotonou, Republique du Benin
229 21 307992 • fax: 229 21 302329
www.ireep.org

with support units at

Michigan State University (MSU)
Department of Political Science
East Lansing, MI 48824
517 353 6590 • fax: 517 432 1091
www.polisci.msu.edu

University of Capetown (UCT)
Democracy in Africa Research Unit
Centre for Social Science Research
Private Bag Rondebosch 7701 South Africa
Office: 27 21 650 3827 • Dept. 27 21 650 3811
fax: 27 21 650 4657
www.cssr.uct.ac.za

www.afrobarometer.org

AFROBAROMETER WORKING PAPERS

Working Paper No. 103

TRIBALISM AS A MINIMAX-REGRET STRATEGY: EVIDENCE FROM VOTING IN THE 2007 KENYAN ELECTIONS

by Mwangi S. Kimenyi and Roxana Gutierrez Romero

October 2008

Mwangi S. Kimenyi is an Associate Professor of Economics at the University of Connecticut.

Roxana Gutierrez Romero is a researcher in the Department of International Development at the University of Oxford.

AFROBAROMETER WORKING PAPERS

Afrobarometer publications report the results of national sample surveys on the attitudes of citizens in selected African countries towards democracy, markets, civil society, and other aspects of development. The Afrobarometer is a collaborative enterprise of the Centre for Democratic Development (CDD, Ghana), the Institute for Democracy in South Africa (IDASA), and the Institute for Empirical Research in Political Economy (IREEP) with support from Michigan State University (MSU) and the University of Cape Town, Center of Social Science Research (UCT/CSSR). Afrobarometer papers are simultaneously co-published by these partner institutions and the Globalbarometer.

Working Papers and Briefings Papers can be downloaded in Adobe Acrobat format from www.afrobarometer.org.

co-published with:

Tribalism as a Minimax-Regret Strategy: Evidence from Voting in the 2007 Kenyan Elections[1]

Abstract

Although many studies find that voting in Africa approximates an ethnic census in that voting is primarily along ethnic lines, few studies have sought to explain such voting behavior using a rational choice framework. In this note, we use data of voter opinions from a survey conducted two weeks before the 2007 Kenyan presidential elections to evaluate the primary motivation for voting. We analyze voter responses on a number of issues and show that there are major differences in expected benefits across ethnic groups depending on the winning presidential candidate. We demonstrate that the decision to participate in the election is largely influenced by the expected benefits such that voting is primarily on the basis of minimax-regret strategy. We test the predictions of this model using actual data on voter turnout in the December 2007 elections. Our results offer credence to the minimax regret model as proposed by Ferejohn and Fiorina (1974) and refute the Downsian expected utility model.

Keywords: Tribalism, ethnic divisions, elections, economics of voting, Kenya Elections

[1] This document is an output from research funding by the UK Department for International Development (DFID) as part of the iiG, a research programme to study how to improve institutions for pro-poor growth in Africa and South-Asia. The views expressed are not necessarily those of DFID. The authors are grateful to Center for the Study of African Economies for financial support and to Prof. William Shughart for helpful comments.

Introduction

A well-known prediction of the rational voter hypothesis as formulated by Downs (1957) and extended by Tullock (1967) and Riker and Ordeshook (1968), is that, given the extremely low probability that one voter brings about the victory of a candidate or issue, rational self-interested individuals should not vote. However, this outcome contradicts the observed behavior of voters: many vote even in those elections where the probability of one's vote being pivotal is miniscule (that is where the number of voters "N" is large such that the probability of a voter being decisive approaches zero). Given that rationality and self interest assumptions are applicable in political markets as well as in private markets, this outcome presents a paradox. An interesting focus in the study of the economics of voting has been on attempting to unravel why rational people vote when the expected benefits from voting are likely to be less than the costs.

Several plausible theories to explain the voting paradox have been proposed.[2] In one such attempt, Ferejohn and Fiorina (1974; 1975), seek to rescue "rational choice theorists from this embarrassing predicament" and propose an alternative voting theory whereby the motivation for voting is to minimize possible maximum regret—the minimax-regret strategy. Ferejohn and Fiorina argue that voters cannot assign probabilities to outcomes under uncertainty. Instead, they compute regrets (losses) associated with different strategies and choose the strategy that minimizes maximum possible regret. Thus, in this formulation, the voter is motivated to vote in order to avoid regretting should a less preferred candidate or issue were to be selected as a result of the voter abstaining. Although the minimax-regret model offers a promising explanation of voter participation, it has been challenged on theoretical grounds. For example, the model has been criticized because of it extreme assumption of complete uncertainty concerning probabilities of electoral outcomes. Furthermore, the model lacks strong empirical support (Blais et al. 1995).

In this paper, we provide evidence that offers credence to the theory of voting on the basis of minimax-regret. We utilize unique data of opinions by prospective Kenyan voters obtained through a survey conducted two weeks before the 27 December 2007 national and presidential election. The information on voter opinions is complemented with evidence of actual turnout in the election as reported by the Kenyan Electoral Commission. By evaluating voter opinions on a number of issues, we present payoff and regret matrices from which we formulate plausible hypotheses and predictions about voting behavior. Our results suggest that ethnic voting patterns are to a large extent the outcome of voting on the basis of minimax-regret. In Section II, we provide a brief summary of voter opinions and also simple payoff and regret matrices followed by some empirical results of voter turnout. Section V concludes with suggestions for institutional reforms.

Minimax-Regret and Tribal Voting

The introduction of competitive party politics in Kenya has generally been associated with increased ethnic polarization (Muigai 1995; Oyugi 1997; Kimenyi 1997; Orvis 2001). Of considerable concern is that competitive elections have been marred by widespread ethnic violence (Kimenyi and Ndung'u 2005). In December 2007, Kenya held what was the most competitive presidential election since independence. The three leading candidates included the incumbent president Mwai Kibaki (Party of National Unity-PNU), Raila Odinga (Orange Democratic Movement-ODM), and Kalonzo Musyoka (Orange Democratic Movement-Kenya- ODM-K).[3] As the election date approached, opinion polls showed that Kibaki and Odinga were in a statistical tie and it was difficult to predict a winner with any degree of certainty. Such a competitive and peaceful electoral process should foster confidence in the institutions of democracy.

[2] See Dowding (2005) and Geys (2006) for a recent survey of various studies that have sought to resolve the voting paradox.

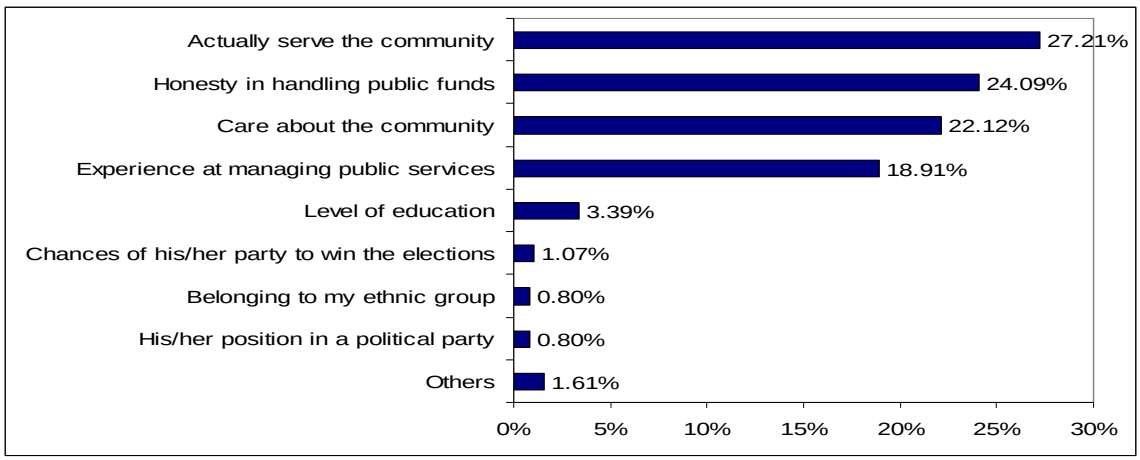
[3] Although there were several other presidential candidates, only three had national support and all others were marginal with limited following.

Unfortunately, the election process ended up in a dispute followed by unprecedented levels of violence and displacement of people thereby weakening the institutions of governance considerably. The analysis in this paper sheds light on why and how Kenyans voted, and what factors could have triggered divisions of the electorate and subsequent post-election violence.

About two weeks before the 27 December 2007 general election, researchers from the University of Oxford, University of Connecticut and Michigan State University, conducted a survey of voter opinions.[4] The primary purpose of the survey was to gather information on key factors influencing voter preferences in Kenya. The survey collected information on a wide range of voter characteristics and also opinions about the government, accountability, violence, candidate and party preferences, etc. The survey sample included 1,207 Kenyans aged 18 and over from all of the country's eight provinces, and covering 76 out of 210 electoral constituencies. The sample is nationally representative and as such captures the rural-urban split; and the ethnic distribution of the sample respondents mirrors the ethnic distribution of the national population according to the country's latest population Census (See Bratton and Kimenyi 2008).

The survey data provide a unique opportunity to explore what motivated Kenyans to vote and what shaped their voting intentions. To understand voting intentions we started by asking likely voters to state the main issue motivating them to select their preferred presidential candidate. As Figure 1 shows, 90 per cent of the population stated that they would select a candidate based on the candidate's track-record of honesty in managing public services and care for the community. Perhaps, most surprisingly, only less than one per cent of survey respondents (0.80 percent) stated that the ethnicity of the candidate was the most important factor in shaping their voting motivations. From the responses to this question we might infer that voters are interested in the quality of leadership and not on the ethnicity of their leader. However, a different picture emerges when we look at the voting intentions according to voters' ethnicity. Table 1 presents the voter intentions of voters from three ethnic groups that also had major presidential candidates. The Table shows that there is a clear uniform pattern in the voting intentions of each ethnic group. The three main presidential candidates, Kibaki (a Kikuyu), Odinga (a Luo) and Kalonzo (a Kamba) were overwhelmingly supported by members of their own ethnic groups. Even voters from other ethnic groups that did not have a major presidential candidate contending in the elections were strongly aligned to one of the three main presidential candidates. Thus, on the one hand, voters indicate that their primary motivation for candidate choice is driven by policy and the character of the candidate. On the other hand, when asked how they intend to vote, clear ethnic patterns emerge.

Figure 1. Self-Described Voting Motivations



[4] The survey was funded by the Center for Study of African Economies, University of Oxford, UK.

Table 1. Voting Intentions by Ethnic Origin

	Percent Intending to Vote for Presidential Candidate		
Voters Ethnic Group	Kibaki (Kikuyu)	Odinga (Luo)	Musyoka (Kamba)
Kikuyu	88.1	5.8	0.4
Luo	3.4	93.9	0
Kamba	19.6	0.9	73.2

We explore further possible reasons for this apparent contradiction between stated factors influencing the choice of a candidate and the tendency to vote along ethnic lines. One possible reason could be that preferences over issues and policy vary systematically and in distinct ways across ethnic groups. In other words, the positions of the median ethnic voter vary substantially across the various ethnic groups. Another possible explanation might be that there is low level trust amongst ethnic groups. Lack of trust might motivate voters to select a candidate from own ethnic group over an otherwise better quality candidate just because they may not trust leaders from other ethnic groups. In the survey, one question sought to investigate social distance between groups by focusing on expressed trust of members of other ethnic groups. As Table 2 shows, Kenyans mistrust members of other ethnic groups. Very few respondents indicated that they trust members outside their own ethnic group a lot. The lack of trust of people from other ethnic groups is particularly high among those of Kikuyu and Luo origin. For these two groups, up to 60 percent of the respondents do not trust at all or trust only a little, people from other ethnic groups.[5]

Table 2: Ethnicity and Trust

Respondent's Ethnic Group	**How much do you trust Kenyans from other ethnic groups?**			
	Not at all	Just a little	Somewhat	A lot
Kikuyu	20.8	42.0	28.8	7.5
Luo	20.3	41.9	30.4	4.7
Kamba	6.2	43.8	44.6	4.5
Luhya	16.3	42.6	28.9	5.8
Kalenjin	13.6	45.6	30.1	9.7
Mijikenda	2.7	36.0	41.3	13.3
ALL	14.3	42.6	31.9	7.8

In light of the extensive lack of trust expressed by respondents, it is of interest to determine which ethnic groups mistrust each other most and also to unravel why this might be the case. We do so in an indirect way by asking respondents whether they feel particularly distant from a specific political party. Given that political parties are overwhelmingly supported by specific ethnic groups, assessing whether people feel very distant to a party might tell us which ethnic groups they do not trust.

The results reported in Table 3 reveal that 40 percent of respondents stated that they felt very distant from some specific political party. Of the Kikuyus, over 50 percent felt distant from the ODM (a party supported mainly by Luos, Kalenjin and Luhyas). Likewise, a similar proportion of Luos stated that they felt distant from the PNU (a party supported mainly by Kikuyu, Embu and Merus). The data also show that other ethnic groups felt very distant from the three main political parties. For instance, the Kambas felt very distant from the ODM, while the Luhya, Kalenjin and Mijikenda feel very distant from the PNU. From this evidence we can infer that the high levels of mistrust across ethnic groups extend to the political arena. Furthermore, it is possible to infer which groups mistrust each other most. In this case, it does appear that there is a very high level of mistrust between the Kikuyus and Luos.

[5] Nonetheless, it is important to note that from these responses we cannot infer which specific ethnic groups they mistrust.

Table 3: Opinions about Political Parties

Respondent's Ethnic Group	Do you feel very distant from any particular party and which party is that?			
	ODM	ODM-K	PNU	NA
Kikuyu	52.7	5.8	2.7	35.4
Luo	3.4	4.1	53.4	36.5
Kamba	30.4	1.8	9.8	58.0
Luhya	12.6	2.6	44.7	36.3
Kalenjin	7.8	1.9	41.7	9.7
Mijikenda	5.3	10.7	28.0	50.7
ALL	42.9	6.9	33.0	7.8

NA: Do not feel distant from any party.

To explain why voting behaviour might be influenced by the expressed mistrust of other ethnic groups, we look into some possible sources of mistrust. During the election campaign, the opposition candidates raised issues of ethnic favouritism and discrimination by the incumbent government. Such perceptions could breed mistrust and grievances that may motivate voters to revert to ethnic voting. In the survey, one question sought to gather information about respondents' perceptions of how their own ethnic group was treated by the incumbent government relative to other ethnic groups. Table 4 reports the summary of the responses by ethnicity The most salient result concerns the responses of the Luo and Kikuyu. While only 3.1 percent of Kikuyus felt that their group was treated worse or much worse than others, this figure was 41.9 percent for Luos. Likewise, while over 20 percent of Kikuyus consider that their group is treated better or much better, for Luo respondents this figure is only 4.1 percent.

Voter opinions and perceptions are informative in terms of ethnic groups' expectations. Low trust of members of other ethnic groups implies that it is unlikely that the majority of voters would trust candidates from other ethnic groups over a candidate from their own group. Likewise, distance from a particular party also suggests that voters expect to benefit much less were such party to win the election. Thus, if we focus on Kikuyu and Luo voters, it is clear that Kikuyus expect much lower benefits from leadership under the ODM, while Luo voters expect low benefits from leadership under the PNU. In other words, the opinions convey significant differences in expectations of benefits to the two groups depending on which party wins. Luos benefit a great deal from an ODM win and Kikuyus benefit from a PNU win. According to Ferejohn and Fiorina, it is such expectations of benefits that primarily drive voting on the basis of minimax-regret.

Table 4 Opinions about Group Treatment by Government

Respondent's Ethnic Group	Is your group's treatment by government, worse, the same or better					
	Much worse	Worse	Same	Better	Much Better	NA
Kikuyu	0	3.1	31.4	16.8	4.9	43.8
Luo	10.1	31.8	17.6	2.7	1.4	36.5
Kamba	0.9	10.7	31.2	3.6	0.9	52.7
Luhya	1.1	7.4	21.6	10	1.1	56.8
Kalenjin	4.9	7.8	34.0	1.9	0.0	50.5
Mijikenda	2.7	28.0	13.3	5.3	0.0	50.7
ALL	2.6	13.5	25.8	9.1	1.9	46.4

N/A: Non-responses

The above conclusion is supported by the opinions of ethnic group treatment by the government. Here we observe two distinct perceptions about treatment by incumbent government: preferential treatment (PT) to Kikuyus and Discriminatory treatment (DT) to Luos. Table 5a and 5b represents the payoff and regret matrices suggested by these responses. Suppose Odinga were to win. A Luo voter would expect, first, a gain by elimination of perceived discriminatory treatment (DT). At the same time, it is conceivable that the Luo voter would also expect a gain of PT (preferential treatment) under Odinga leadership. On the other hand, a win by Kibaki would result in PT to Kikuyus while a loss would eliminate PT hence payoff would be zero (0). Table 5b represents the regret matrix. As is evident, the worst possible outcome for both groups is a win by a candidate from another ethnic group. Of note also is that, based on the foregoing discussion, the highest payoff to Luo voters is if Odinga wins followed by Kikuyus voters if Kibaki wins. This is because the Luos would expect a gain in DT (elimination of perceived discriminatory treatment) and also a PT (expected preferential treatment) while Kikuyus would only expect PT (continued preferential treatment) under a Kibaki regime.

Table 5a: Ethnic Voting Payoff Matrix

Ethnicity of Voter	**Presidential Candidate and Group of origin**	
	Odinga (Luo) Wins	**Kibaki- (Kikuyu) Wins**
Luo Voter	PT- (-DT) (positive)	DT (negative)
Kikuyu Voter	0	PT (positive)

Table 5b: Ethnic Voting Regret Matrix

Ethnicity of Voter	**Presidential Candidate and Group of origin**	
	Odinga (Luo) Wins	**Kibaki- (Kikuyu) Wins**
Luo Voter	0	-(PT +DT) (large positive)
Kikuyu Voter	-PT (negative)	0

Simple Tests of Minimax-Regret Voting

We now turn to predictions of turnout. In the expected utility model, the decision to vote is based on net benefits shown as: R = BP-C, where R is the rewards from voting, B is the difference in utility a voter expects to receive if the preferred candidate wins, P is the probability that an individual's vote is decisive and C is the cost of voting. The key distinction between the Downsian expected utility model and that of the minimax-regret is that, in the expected utility maximization model, the value of P and therefore the closeness of an election, drives turnout. On the other hand, in the minimax-regret model, closeness is not an important determinant of voting and instead it is the expected benefits net of costs that determine voter turnout.

Value of P and Turnout in the Kenyan Elections-Constituencies:

The predication of the Downsian model is that voter turnout is positively related to the closeness of the election. On the other hand, voting on minimax-regret does not depend on closeness. Thus, a simple test of how closeness influenced turnout in the Kenyan elections can reveal which of the two theories of voting performs better. Using reported data on actual votes cast during the 2007 presidential elections and the number of registered voters across the 209 constituencies that held elections, we compute a measure of closeness using the percentage gross margin.[6] The gross margin is smaller the closer the election and larger the larger the difference between the votes cast for winning candidate and the second most popular candidate. We then estimate a simple regression model with percentage turnout as the dependent variable

[6] There are 210 parliamentary constituencies but elections in 2 constituencies were nullified.

(TURNOUT) and percentage gross margin (PGM) as the independent variable.[7] We also include the number of registered voters (REG) to capture potential free rider effects on turnout. According to the expected utility maximization model, we expect turnout to increase as the gross margin decreases (hence a negative relationship). On the other hand, if voting is on the basis of the minimax-regret, turnout should decrease as the gross margin decreases (hence a positive relationship). The ordinary least regression results are as follows:

(1) TURNOUT = 57.573 + 0.214 PGM
(41.88)*** (11.22)*** Adjusted R^2: 0.375

(2) TURNOUT = 104.152 + 0.228 PGM – 0.430 ln REG
(7.19)*** (11.89)*** (-3.23)*** Adjusted R^2: 0.40

These results show that turnout is higher in constituencies where the election is less "close", thus supporting voting on the basis of minimax-regret. At least, even if the results might not be conclusive, we can, with a fair degree of certainty conclude that voters' estimation of P did not influence voting at the constituency level.[8]

Expected B and Turnout in the Kenyan Elections by Ethnic Groups

We have already observed that Kikuyu and Luo voters appear to be the two groups with the most to gain or lose depending on whether Kibaki or Odinga were to win. This is conveyed in the information about distance from political parties and also how the groups perceive their treatment by the government. Based on the information provided in Tables 3 and 4 and also the regret matrix, and focusing on the expected benefits, we can predict that turnout should not only be highest among the Kikuyu and Luo voters, but also that the gross margins in those constituencies dominated by each of the groups should be high. This is confirmed in Table 6. Thus, we demonstrate minimax-regret voting by the existence of both high turnout and high gross margins.

But this conclusion might be challenged on the basis that it is probably because the leading presidential candidates were from the two groups. However, looking at voting by Kambas, we notice that the gross margin is even higher than for the Kikuyus. Nevertheless, turnout was much lower. This is consistent with the expected benefits- 58 percent of Kambas did not feel distant from any party and about 30 percent considered the treatment of their group to be the same as other groups. Turnout by voters from other ethnic groups is consistent with the expected benefits inferred form Table 3 and 4. Thus, overall, we can conclude that a primary factor driving Kenyans to the ballot box was the expected benefits and thus they voted on the basis of minimax-regret.

Table: 6 Turnout and Gross Margin by Dominant Ethnic Groups

Ethnic Group	Voter Turnout		Gross Margin	
	Mean	Standard Deviation	Mean	Standard Deviation
KIKUYU	80.05	6.81	91.35	16.83
LUO	84.06	7.95	98.12	2.19
KAMBA	67.66	8.27	96.51	4.48
LUHYA	64.14	5.40	50.25	21.99
KALENJIN	74.29	11.44	66.11	28.14
MIJIKENDA	54.83	9.57	30.48	18.28

[7] Percentage Gross Margin in a particular constituency is computed by subtracting the votes cast for the 2nd place candidate from those of the winning candidate and dividing by total votes cast multiplied by 100.

[8] In an analysis of voter turnout during the 2005 Kenyan constitution referendum, Kimenyi and Shughart (2008) find similar results.

Conclusion

This note provides rare evidence of voting behaviour in a developing country setting. Using survey data on voter opinions and actual voter turnout in the Kenyan elections, we find evidence that ethnic voting can be explained on the basis of a minimax-regret strategy. Our survey indicates that there are low levels of trust amongst ethnic groups, likely fuelled by perceptions that the current government has favoured certain ethnic groups and discriminated against others. In addition, voter opinions from the survey suggest that the country is highly polarized along ethnic lines, a factor which could explain the recent episodes of ethnic violence. This points to the necessity of constitutional reforms that devolve power and places sufficient constraints on the executive so as to minimize discriminatory practices

References:

Bratton, Michael and Kimenyi, Mwangi S. (2008), "Voting in Kenya: Putting Ethnicity in Perspective," *Journal of Eastern African Studies*, Vol. 2(1):272-289.

Dowding, Keith (2005), "Is it Rational to Vote? Five Types of Answer and a Suggestion," *Political Studies*, Vol. 7: 442-459.

Downs, Anthony (1957), *An Economic Theory of Democracy*, New York: Harper and Row.

Feddersen, Tomothy J. (2004), "Rational Choice Theory and the Paradox of Not Voting," *The Journal of Economic Perspective*, Vol. 18 (1): 99-112.

Ferejohn, John A. and Fiorina, Morris A. (1974), "The Paradox of Not Voting: A Decision Theoretic Analysis," *American Political Science Review*, Vol. 68 (2) June: 525-536.

Ferejohn, John A. and Fiorina, Morris A. (1975), "Closeness Counts Only in Horseshoes and Dancing," *American Political Science Review*, Vol. 69 (3) September: 920-925.

Geys, Benny, (2006), "Rational Theories of Voter Turnout: A Review," Political Studies Review, Vol. 4: 16-35.

Kimenyi, Mwangi S. *Ethnic Diversity, Liberty and the State: The African Dilemma*, Cheltenham, Eng: Edward Elgar: 1997.

Kimenyi, Mwangi S. and Ndung'u, Njuguna, S., "Sporadic Ethnic Violence: Why Has Kenya Not Experienced a full-blown Civil War?" in P. Collier and N. Sambanis (eds), *Understanding Civil War* (Vol. 1: Africa), World Bank: Washington, D.C., 2005.

Kimenyi, Mwangi S. and Shughart, William F. II. (2008), " The Political Economy of Constitutional Choice: A Study of the 2005 Kenyan Constitutional Referendum," Working Paper, Department of Economics, University of Connecticut, March 2008.

Ledyard, John O. (1981), "The Paradox of Voting and Candidate Competition: A general Equilibrium Analysis," in G. Hornwich and J. Quirk, eds. *Essays in Contemporary Fields of Economics*, West Lafayette: Purdue University Press.

Ledyard, John O. (1984), "The Pure Theory of Large-Two-Candidate Elections," *Public Choice*, Vol 44(1): 7-41.

Muigai, Githu. "Ethnicity and the Renewal of Competitive Politics in Kenya," in Harvey Glickman, ed. *Ethnic Conflict and Democratization*, Atlanta, GA: The African Studies Association Press, 1995, 161-96.

Orvis, Stephen. "Moral Ethnicity and Political Tribalism in Kenya's 'Virtual Democracy'," *African Issues*, 29, no 1/2 (2001): 8-13.

Oyugi, Walter O. "Ethnicity in the Electoral Process: The 1992 General Elections in Kenya," *African Journal of Political Science* 2, no 1 (1997): 41-69.

Palfrey, Thomas R. and Rosenthal, Howard (1983), " A Strategic Calculus of Voting," *Public Choice*, Vol. 4(1): 7-53.

Palfrey, Thomas R. and Rosenthal, Howard (1984), " Participation and Provision of Discrete Public goods: A Strategic Analysis, *Journal of Public Economics*, 24: 171-93.

Riker, William H. and Ordeshook, Peter C. (1968), "A Theory of the Calculus of Voting," *American Political Science Review*, 62 (March): 25-42.

Riker, William H. and Ordeshook, Peter C. (1973), *Introduction to Positive Political theory*, Englewood Cliffs, NJ: Printice-Hall.

Tullock, Gordon (1967), *Toward a Mathematics of Politics*, Ann Arbor: University of Michigan Press.

Publications List

AFROBAROMETER WORKING PAPERS

No. 103 Kimenyi, Mwangi S. and Roxana Gutierrez Romero. “Tribalism as a Minimax-Regret Strategy: Evidence from Voting in the 2007 Kenyan Elections.” 2008.

No. 102 Lavallée, Emmanuell, Mireille Razafindrakoto and François Roubaud. “Corruption and Trust in Political Institutions in sub-Saharan Africa.” 2008.

No. 101 Koussihouèdé, Oswald and Damase Sossou. “Frustration Relative de Démocratie en Afrique.” 2008.

No. 100 Nunn, Nathan and Leonard Wantchekon. “The Trans-Atlantic Slave Trade and the Evolution of Mistrust in Africa: An Empirical Investigation.” 2008.

No. 99 Bratton, Michael. “Voting Buying and Violence in Nigerian Election Campaigns.” 2008.

No. 98 Mattes, Robert. “The Material and Political Bases of Lived Poverty in Africa: Insights from the Afrobarometer.” 2008.

No. 97 Sarsfield, Rodolfo and Fabián Echegaray. “Looking Behind the Window: Measuring Instrumental and Normative Reasoning in Support for Democracy.” 2008.

No. 96 Kuenzi, Michelle T. “Social Capital And Political Trust In West Africa.” 2008.

No. 95 Bratton, Michael and Mwangi S. Kimenyi. “Voting in Kenya: Putting Ethnicity in Perspective.” 2008.

No. 94 Logan, Carolyn. “Rejecting the Disloyal Opposition? The Trust Gap in Mass Attitudes Toward Ruling and Opposition Parties in Africa.” 2008.

No. 93 Logan, Carolyn. “Traditional Leaders In Modern Africa: Can Democracy And The Chief Co-Exist?” 2008.

No. 92 Dowd, Robert A. and Michael Driessen. “Ethnically Dominated Party Systems And The Quality Of Democracy: Evidence From Sub-Saharan Africa.” 2008.

No. 91 Mattes, Robert and Carlos Shenga. “’Uncritical Citizenship’” in a ‘Low-Information’ Society: Mozambicans in Comparative Perspective.” 2007.

No. 90 Bhavnani, Ravi and David Backer. “Social Capital and Political Violence in Sub-Saharan Africa.” 2007.

No. 89 Eiffert, Ben, Edward Miguel and Daniel Posner. “Political Sources of Ethnic Identification in Africa.” 2007.

No. 88 Moehler, Devra C. and Staffan I. Lindberg. “More than Huntington's 'Test': Turnovers as Antidotes to Polarization.” 2007.

No. 87 Chikwanha, Annie and Eldred Masunungure. “Young and Old in Sub-Saharan Africa: Who Are the Real Democrats?” 2007.

No. 86 Razafindrakoto, Mireille and Francois Roubaud. “Corruption, Institutional Discredit and Exclusion of the Poor: A Poverty Trap.” 2007.

No. 85 Konold, Carrie. “Perceived Corruption, Public Opinion and Social Influence in Senegal.” 2007.

No. 84 Alemika,Etannibi. “Quality of Elections, Satisfaction with Democracy and Political Trust in Africa.” 2007.

No. 83 Cheeseman, Nicholas And Robert Ford. “Ethnicity As A Political Cleavage.” 2007.

No. 82 Mattes, Robert. “Democracy Without People: Political Institutions And Citizenship In The New South Africa.” 2007.

No. 81 Armah-Attoh, Daniel, E Gyimah-Boadi And Annie Barbara Chikwanha. “Corruption And Institutional Trust In Africa: Implications For Democratic Development.” 2007.

No. 80 Wantchekon, Leonard and Gwendolyn Taylor. “Political Rights versus Public Goods: Uncovering the Determinants of Satisfaction with Democracy in Africa.” 2007.

No. 79 Chang, Eric. “Political Transition, Corruption, and Income Inequality in Third Wave Democracies.” 2007.

No. 78 Battle, Martin and Seely, Jennifer C. “It’s All Relative: Competing Models of Vote Choice in Benin.” 2007.

No.77 Wantchekon, Leonard, Paul-Aarons Ngomo, Babaly Sall and Mohamadou Sall. “Support for Competitive Politics and Government Performance: Public Perceptions of Democracy in Senegal.” 2007.

No.76 Graham, Carol and Matthew Hoover. “Optimism and Poverty in Africa: Adaptation or a Means to Survival?” 2007.

No.75 Evans, Geoffrey and Pauline Rose. “Education and Support for Democracy in Sub-Saharan Africa: Testing Mechanisms of Influence.” 2007.

No.74 Levi, Margaret and Audrey Sacks. “Legitimating Beliefs: Sources and Indicators.” 2007.

No.73 McLean, Lauren Morris. “The Micro-Dynamics of Welfare State Retrenchment and the Implications for Citizenship in Africa.” 2007.

No.72 Ferree, Karen and Jeremy Horowitz. “Identity Voting and the Regional Census in Malawi.” 2007.

No.71 Cho, Wonbin and Matthew F. Kirwin. “A Vicious Circle of Corruption and Mistrust in Institutions in sub-Saharan Africa: A Micro-level Analysis.” 2007.

No.70 Logan, Carolyn, Thomas P. Wolf and Robert Sentamu. “Kenyans and Democracy: What Do They Really Want From It Anyway?” 2007.

No.69 Uslaner, Eric. “Corruption and the Inequality Trap in Africa.” 2007.

No.68 Lewis, Peter. “Identity, Institutions and Democracy in Nigeria.” 2007.

No.67 Mattes, Robert. “Public Opinion Research in Emerging Democracies: Are the Processes Different?” 2007.

No.66 Cho, Wonbin. “Ethnic Fractionalization, Electoral Institutions, and Africans’ Political Attitudes.” 2007.

No.65 Bratton, Michael. “Are You Being Served? Popular Satisfaction with Health and Education Services in Africa.” 2006.

No.64 Fernandez, Kenneth E. and Michelle Kuenzi. “Crime and Support for Democracy: Revisiting

Modernization Theory." 2006.

No.63 Bratton, Michael and Carolyn Logan. "Voters But Not Yet Citizens: The Weak Demand for Vertical Accountability in Africa's Unclaimed Democracies." 2006.

No.62 Bratton, Michael and Mxolisi Sibanyoni. "Delivery or Responsiveness? A Popular Scorecard of Local Government Performance in South Africa." 2006.

No.61 The Afrobarometer Network. "Citizens and the State in Africa: New Results From Afrobarometer Round 3." 2006.

No.60 The Afrobarometer Network. "Where is Africa going? Views From Below: A Compendium of Trends in Public Opinion in 12 African Countries, 1999-2006." 2006.

No.59 Bratton, Michael and Eldred Masunungure. "Popular Reactions to State Repression: Operation Murambatsvina in Zimbabwe." 2006.

No.58 Logan, Carolyn and Michael Bratton. "The Political Gender Gap in Africa: Similar Attitudes, Different Behaviors." 2006.

No.57 Evans, Geoffrey and Pauline Rose. "Support for Democracy in Malawi: Does Schooling Matter?" 2006.

No.56 Bratton, Michael. "Poor People and Democratic Citizenship in Africa." 2006.

No.55 Moehler, Devra C. "Free and Fair or Fraudulent and Forged: Elections and Legitimacy in Africa." 2005.

No.54 Stasavage, David. "Democracy and Primary School Attendance: Aggregate and Individual Level Evidence from Africa." 2005.

No. 53 Reis, Deolinda, Francisco Rodrigues and Jose Semedo. " Atitudes em Relação à Qualidade da Democracia em Cabo Verde." 2005.

No. 52 Lewis, Peter and Etannibi Alemika. "Seeking the Democratic Dividend: Public Attitudes and Attempted Reform in Nigeria." 2005.

No. 51 Kuenzi, Michelle and Gina Lambright. "Who Votes in Africa? An Examination of Electoral Turnout in 10 African Countries." 2005.

No.50 Mattes, Robert and Doh Chull Shin. "The Democratic Impact of Cultural Values in Africa and Asia: The Cases of South Korea and South Africa." 2005.

No.49 Cho, Wonbin and Michael Bratton. "Electoral Institutions, Partisan Status, and Political Support: A Natural Experiment from Lesotho." 2005.

No.48 Bratton, Michael and Peter Lewis. "The Durability of Political Goods? Evidence from Nigeria's New Democracy." 2005.

No.47 Keulder, Christiaan and Tania Wiese. "Democracy Without Democrats? Results from the 2003 Afrobarometer Survey in Namibia." 2005.

No.46 Khaila, Stanley and Catherine Chibwana. "Ten Years of Democracy in Malawi: Are Malawians Getting What They Voted For?" 2005.

No.45 Schedler, Andreas and Rodolfo Sarsfield. "Democrats with Adjectives: Linking Direct and Indirect

Measures of Democratic Support." 2004.

No.44 Bannon, Alicia, Edward Miguel, and Daniel N. Posner. "Sources of Ethnic Identification in Africa." 2004.

No.43 Bratton, Michael. "State Building and Democratization in Sub-Saharan Africa: Forwards, Backwards, or Together?" 2004.

No.42 Chikwanha, Annie, Tulani Sithole, and Michael Bratton. "The Power of Propaganda: Public Opinion in Zimbabwe, 2004." 2004.

No.41 Mulenga, Chileshe L., Annie Barbara Chikwanha, and Mbiko Msoni. "Satisfaction with Democracy and Performance of the New Deal Government: Attitudes and Perceptions of Zambians." 2004.

No.40 Ferree, Karen E. "The Micro-Foundations of Ethnic Voting: Evidence from South Africa." 2004.

No.39 Cho, Wonbin. "Political Institutions and Satisfaction with Democracy in Sub-Saharan Africa." 2004.

No.38 Mattes, Robert. "Understanding Identity in Africa: A First Cut." 2004.

No.37 Leysens, Anthony J. "Marginalisation in Southern Africa: Transformation from Below?" 2004.

No.36 Sall, Babaly and Zeric Kay Smith, with Mady Dansokho. "Libéralisme, Patrimonialisme ou Autoritarisme Atténue : Variations autour de la Démocratie Sénégalaise." 2004.

No.35 Coulibaly, Massa and Amadou Diarra. "Démocratie et légtimation du marché: Rapport d'enquête Afrobaromètre au Mali, décembre 2002." 2004.

No.34 The Afrobarometer Network. "Afrobarometer Round 2: Compendium of Results from a 15-Country Survey." 2004.

No.33 Wolf, Thomas P., Carolyn Logan, and Jeremiah Owiti. "A New Dawn? Popular Optimism in Kenya After the Transition." 2004.

No.32 Gay, John and Robert Mattes. "The State of Democracy in Lesotho." 2004.

No.31 Mattes, Robert and Michael Bratton. "Learning about Democracy in Africa: Awareness, Performance, and Experience." 2003

No.30 Pereira, Joao, Ines Raimundo, Annie Chikwanha, Alda Saute, and Robert Mattes. "Eight Years of Multiparty Democracy in Mozambique: The Public's View." 2003

No.29 Gay, John. "Development as Freedom: A Virtuous Circle?" 2003.

No.28 Gyimah-Boadi, E. and Kwabena Amoah Awuah Mensah. "The Growth of Democracy in Ghana. Despite Economic Dissatisfaction: A Power Alternation Bonus?" 2003.

No.27 Logan, Carolyn J., Nansozi Muwanga, Robert Sentamu, and Michael Bratton. "Insiders and Outsiders: Varying Perceptions of Democracy and Governance in Uganda." 2003.

No.26 Norris, Pippa and Robert Mattes. "Does Ethnicity Determine Support for the Governing Party?" 2003.

No.25 Ames, Barry, Lucio Renno and Francisco Rodrigues. "Democracy, Market Reform, and Social Peace in Cape Verde." 2003.

No.24 Mattes, Robert, Christiaan Keulder, Annie B. Chikwana, Cherrel Africa and Yul Derek Davids. "Democratic Governance in South Africa: The People's View." 2003.

No.23 Mattes, Robert, Michael Bratton and Yul Derek Davids. "Poverty, Survival, and Democracy in Southern Africa." 2003.

No.22 Pereira, Joao C. G., Yul Derek Davids and Robert Mattes. "Mozambicans' Views of Democracy and Political Reform: A Comparative Perspective." 2003.

No.21 Whiteside, Alan, Robert Mattes, Samantha Willan and Ryann Manning. "Examining HIV/AIDS in Southern Africa Through the Eyes of Ordinary Southern Africans." 2002.

No.20 Lewis, Peter, Etannibi Alemika and Michael Bratton. "Down to Earth: Changes in Attitudes Towards Democracy and Markets in Nigeria." 2002.

No.19 Bratton, Michael. "Wide but Shallow: Popular Support for Democracy in Africa." 2002.

No.18 Chaligha, Amon, Robert Mattes, Michael Bratton and Yul Derek Davids. "Uncritical Citizens and Patient Trustees? Tanzanians' Views of Political and Economic Reform." 2002.

No.17 Simutanyi, Neo. "Challenges to Democratic Consolidation in Zambia: Public Attitudes to Democracy and the Economy." 2002.

No.16 Tsoka, Maxton Grant. "Public Opinion and the Consolidation of Democracy in Malawi." 2002.

No.15 Keulder, Christiaan. "Public Opinion and Consolidation of Democracy in Namibia." 2002.

No.14 Lekorwe, Mogopodi, Mpho Molomo, Wilford Molefe, and Kabelo Moseki. "Public Attitudes Toward Democracy, Governance, and Economic Development in Botswana." 2001.

No.13 Gay, John and Thuso Green. "Citizen Perceptions of Democracy, Governance, and Political Crisis in Lesotho." 2001.

No.12 Chikwanha-Dzenga, Annie Barbara, Eldred Masunungure, and Nyasha Madingira. "Democracy and National Governance in Zimbabwe: A Country Survey Report." 2001.

No. 11 The Afrobarometer Network. "Afrobarometer Round I: Compendium of Comparative Data from a Twelve-Nation Survey." 2002

No.10 Bratton, Michael and Robert Mattes. "Popular Economic Values and Economic Reform in Southern Africa." 2001.

No. 9 Bratton, Michael, Massa Coulibaly, and Fabiana Machado. "Popular Perceptions of Good Governance in Mali." March 2000.

No.8 Mattes, Robert, Yul Derek Davids, and Cherrel Africa. "Views of Democracy in South Africa and the Region: Trends and Comparisons." October 2000.

No.7 Mattes, Robert, Yul Derek Davids, Cherrel Africa, and Michael Bratton. "Public Opinion and the Consolidation of Democracy in Southern Africa." July 2000.

No.6 Bratton, Michael and Gina Lambright. "Uganda's Referendum 2000: The Silent Boycott." 2001.

No.5 Bratton, Michael and Robert Mattes. "Democratic and Market Reforms in Africa: What 'the People' Say."

2000.

No.4 Bratton, Michael, Gina Lambright, and Robert Sentamu. “Democracy and Economy in Uganda: A Public Opinion Perspective.” 2000.

No.3 Lewis, Peter M. and Michael Bratton. “Attitudes to Democracy and Markets in Nigeria.” 2000.

No.2 Bratton, Michael, Peter Lewis, and E. Gyimah-Boadi. “Attitudes to Democracy and Markets in Ghana.” 1999.

No.1 Bratton, Michael and Robert Mattes. “Support for Democracy in Africa: Intrinsic or Instrumental?” 1999.