

Working Paper No. 114

VOTE-BUYING AND POLITICAL BEHAVIOR: ESTIMATING AND EXPLAINING VOTE-BUYING'S EFFECT ON TURNOUT IN KENYA

by Eric Kramon

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

Core Partners

Center for Democratic Development (CDD-Ghono) 95 Nortei Ababio Street, North Airport Residential Area P.O. Bax 15 404, Legon-Acro, Ghono 233 21 776 142 • fox 233 21 753 028 www.cddghono.org The Institute for Bernacocy in South Africa (IDASA) PO. Bax 56950; Pretario Arcadia, 0007, South Africa 27 12 392 0500 • fax: 27 12 320 2414/5 www.idasa.org.zn Institute for Empirical Research in Political Economy (IREEP)
Compus EREAM Glogamey 02 B.P. 372
Cotonou, Republique du Berim
229 21 307992 • fox: 229 21 302329
www.ireep.org

with support units at

Michigan Statu University (MSU) Department of Political Science East Lansing, MI 48824 517 353 6590 • Ian: 517 432 1091 www.polisci.orsu.edu University of Coperaves (UCT)
Democracy in Africa Research Unit
Centre for Social Science Research
Private Bag Rendebooch 7701 South Africa
Office: 27 21 650 3827 * Dept. 27 21 650 3811
fax: 27 21 650 4657
www.csr.uct.ac.zn.

www.afrobarometer.org

AFROBAROMETER WORKING PAPERS

VOTE-BUYING AND POLITICAL BEHAVIOR: ESTIMATING AND EXPLAINING VOTE-BUYING'S EFFECT ON TURNOUT IN KENYA*

by Eric Kramon

October 2009

Eric Kramon is Ph.D. Candidate in the Department of Political Science at the University of California, Los Angeles.

AFROBAROMETER WORKING PAPERS

Editor Michael Bratton

Editorial Board E. Gyimah-Boadi Carolyn Logan **Robert Mattes** Leonard Wantchekon

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.



Idasa







co-published with: GLOBALBAROMETER.

Vote-Buying and Political Behavior: Estimating and Explaining Vote-Buying's Effect on Turnout in Kenya

Abstract

Vote-buying has and continues to be pervasive in many electoral regimes. Yet the relationship between vote-buying and citizen behavior, particularly in the context of the secret ballot, remains largely unknown. In this paper I study vote-buying's effect on voter turnout in Kenya, using a nationally representative survey that includes questions about the country's 2002 presidential and parliamentary elections. Estimating the causal effect of vote-buying on voter turnout is complicated by the strategic nature of vote-buying, and so this study also examines the strategic logic of vote-buying in Kenya. The results suggest that poor individuals and "swing" voters in the country's most electorally competitive districts are most likely to be targeted by vote-buyers. Using these results, I use probit statistical models as well as propensity score matching and estimate that individuals who were approached by a vote-buyer were about 14 percentage points more likely to vote than those who were not, while the least educated individuals were the most highly influenced by vote-buying. These results are puzzling. If voting is secret and voluntary, why does vote-buying have an impact on individual behavior? I propose and test the empirical implications of two potential explanations: a monitoring and punishment mechanism, and a credibility signaling mechanism. The evidence is tentatively consistent with the monitoring and punishment mechanism, and is also consistent with the credibility signaling mechanism. I conclude with discussion of the study's implications for theories of vote-buying and for the quality of democracy and political accountability in settings where vote-buying is commonplace.

Introduction

Where people vote, the phenomenon of vote-buying tends to follow. From the Roman Republic (Yakobson, 1995), to 19th century Britain (O'Leary, 1962) and the United States (Anderson and Tollison, 1990), to such newer democracies as the Philippines (Schaeffer, 2008) and Argentina (Stokes, 2006; Brusco et al., 2004), and to such African countries as Sao Tome and Principe and Nigeria (Vicente, 2008; Bratton, 2008), the practice of vote-buying has been commonplace in political campaigns. Yet despite its persistence, the relationship of vote-buying to citizen voting behavior, particularly in the context of the secret ballot, has puzzled both the political elites that integrate vote-buying into their electoral strategies as well as the scholars that seek to study them. Over two-thousand years ago the Roman politician and thinker Cicero complained that private voting "[allowed] a man to wear a smooth brow while it cloaks the secrets of his heart, and leaves him free to act as he chooses, while he gives any promise he may be asked to give" (cited in Yakobson, 1995). Centuries later, when the British enacted legislation providing for the secret ballot, a parliamentarian noted, "the Ballot Act had promoted that most un-English practice of taking bribes from both sides, or voting against the side from which a bribe had been accepted" (O'Leary, 1962).

The complaints of these political elites are suggestive of two inter-related puzzles presented by the phenomenon of vote-buying in the context of the secret ballot. First, if the privacy of the vote is protected and politicians cannot ensure that targeted citizens vote for them, why does vote-buying occur in many democracies around the world? Where the vote is secret, politicians lack mechanisms to ensure voter compliance while citizens cannot credibly commit to providing their vote after a gift or bribe is received. As such we should expect to see the practice of vote-buying disappear as the secrecy of the vote increases and, in fact, there is evidence to believe that 19th century laws providing for the secret ballot in both the United States and Great Britain were in large part responsible for the decline of vote-buying in those countries (O'Leary, 1962; Anderson and Tollison, 1990). A second puzzle relates to the relationship between vote-buying and the behavior of voters. If citizens can accept a pre-election gift but are free to vote as they please and are not even required to turnout at the polls, why might vote-buying have an effect on voter behavior?

This study seeks to shed light on these questions by examining the effect of vote-buying on individual voter turnout in Kenya, a country where vote-buying is pervasive in election campaigns. I use individual-level survey data from a nationally representative sample of over 1200 Kenyans collected by Afrobarometer. Kenya's 2002 presidential and parliamentary elections serve as a good case for the study of vote-buying and political behavior, as vote-buying was widespread during the election campaign but the polls themselves were relatively free of meddling and distortion by political parties and their allies. The survey asks respondents about their experiences and behavior before and during the country's 2002 presidential and parliamentary elections. Using statistical techniques I test for the effect of exposure to vote-buying across a broad range of model specifications.

That vote-buying is a strategic rather than a random act on the part of political parties and their allies poses a challenge to estimating vote-buying's causal effect. This challenge is compounded by the fact that the theoretical literature produces a number of conflicting predictions regarding the strategies that vote-buying parties are likely to employ when they select vote-buying targets. This lack of theoretical (and empirical) convergence renders it impossible to make *a priori* assumptions about the strategies of Kenyan vote-buyers that could then be accounted for in the estimation procedure. As such, this paper also analyses strategies of vote-buying in Kenya. Results from these analyses suggest those individuals in more politically competitive areas and those who support relatively weak political parties are most likely

¹ Causal inference in the potential outcomes, or counterfactual, framework requires systematic analysis of the treatment assignment mechanism; in this case, the way in which individuals are selected by vote-buyers (Morgan and Winship, 2007)

to be targeted by a vote-buyer. Using these results about vote-buying strategy, I apply statistical techniques to account for them in the estimation strategy

The statistical results are robust and substantively strong: Individuals who have been approached by a vote-buyer are about 15 percentage points more likely to vote than those who were not approached, suggesting that in Kenya, pre-election resource transfers are an important driver of voter turnout. I also find evidence that the least educated citizens are those whose decision to vote is most influenced by vote-buying, while I estimate that vote-buying has no effect on the likelihood that a highly educated person will vote. These results suggest that education and learning might mediate the impact of vote-buying on individual behavior.

That vote-buying has such a strong effect on voter turnout is puzzling. If voters incur costs to go the polls, as the rational choice calculus of voting model suggests (Downs, 1957; Tullock, 1968), then they should, in the context of secret and voluntary voting, be better off accepting the bribe or gift but remaining home on election day. Drawing ideas from the literature on turnout and clientelism, I suggest that vote-buying might influence an individual's decision to vote through two channels: a monitoring and punishment mechanism, and a credibility signaling mechanism (Keefer and Vlaicu, 2008; Robinson and Verdier, 2002). The second part of the paper tests empirical implications of these arguments. Results lend support to the monitoring and punishment hypothesis, suggesting that vote-buying influences individual perception of political party monitoring capacity and violent activity. The analysis also provides support for the credibility signaling mechanism. Individuals approached by a vote-buyer are more likely to believe in the credibility of politician campaign promises than are those who were not approached. Vote-buying thus may help to convey credibility to potential voters and illustrate the willingness of the vote-buying politician to distribute resources to supporters.

Literature

Voter Turnout

The calculus of voting model suggests that people will only vote when the expected benefits of voting outweigh the costs (Downs, 1957; Tullock, 1968). The act of voting thus appears paradoxical, as the probability of being a pivotal voter in any sized election, but particularly national elections, is so small as to essentially be zero, ensuring that any cost to voting will exceed the act's expected benefit. That rational choice approaches have had difficulty explaining one of the most fundamental acts in democratic societies has led to a number of attempts to alter the original model in order to "rationalize" voting behavior. For instance, the simple calculus of voting model has been expanded to integrate other benefits that citizens might derive from voting. Downs (1957) and Riker and Ordeshook (1968) expand the simple decision formula to include an additional parameter, D, where D represents these additional benefits. For Downs, D encapsulates the value to citizens of having democracy continue. According to Riker and Ordeshook, D captures a citizen's duty to vote. For their part, Gerber et al. (2008) argue that social pressure is an important component of D, and illustrate with experimental evidence that social pressure greatly increases the probability that an individual will vote in the U.S. context. Taking an alternative approach, Aldrich (1993) argues that the costs of voting are not particularly high, helping to explain high turnout rates.

Others have couched an individual's decision to vote in a game-theoretic framework. Palfrey and Rosenthal (1983) illustrate that multiple equilibria exist in a game theoretic model of voting, some of which predict high turnout, but later show that strategic uncertainty leads the predictions from the game theoretic model to converge to the calculus of voting prediction (Palfrey and Rosenthal, 1985). In an

 $^{^{2}}$ In the original model, individuals are predicted to vote only when the expected value of doing so exceeds the costs: pB > C. Where p is the probability of being the pivotal voter, B is the additional benefit from the voter's preferred candidate wining the election, and C is the cost of voting.

alternative framework, Ferejohn and Fiorina (1974) argue that potential voters are regret minimaximizers and that under such a decision rule voting is a rational act.

Still others have looked to empirical data to determine the structural and institutional determinants of turnout. Baek (2009) finds that where information costs are low, turnout tends to be higher. Powell (1980) argues that turnout is higher in proportional electoral systems. Blais and Carty (1990) use data from Western Europe and confirm Powell's finding. Jackman (1987) argues that where electoral institutions create incentives for parties to mobilize voters, turnout will be higher. He notes that nationally competitive electoral districts tend to promote higher turnout.

Fewer studies have examined turnout outside of the advanced democracies. In a cross-national study of turnout in Africa, Kuenzi and Lambright (2007) find that the electoral formula and the concurrency of presidential and parliamentary elections are predictors of turnout. Chen and Zhong (2008) study individual's decisions to vote in China's local government elections. They report that those individuals who identify most closely with the regime are most likely to vote. In an earlier study with far different results, Shi (1999) finds that people vote in China's elections because of a desire to punish corrupt officials and facilitate political change. In Egypt, Blaydes (2006) argues that voters turnout because they expect material rewards and Nichter (2008) comes to a similar conclusion in Argentina. In Eastern Europe and Latin America, Kostadinova and Power (2007) find that turnout is higher in founding elections but decreases rapidly thereafter. In a study of political participation in Zambia, Bratton (1999) finds that participation, which includes but is not exclusive to voting, is in large part determined by institutional linkages between individuals and the state. Kuenzi and Lambright (2005) find support for this argument, as they find that those individuals with greater linkages to political parties are most likely to vote.

Vote-buying and Clientelism

One goal of this study is to link scholarship on voter turnout to a literature that has focused on the causes and consequences of vote-buying and clientelism. Much of this literature is focused on the strategic logic of vote-buying in attempts to explain when and to whom vote-buying attempts will be made. An influential model by Cox and McCubbins (1986) predicts that parties will target such efforts to their "core" supporters with whom they have informational advantages. Stokes (2005) extends this logic with a model that predicts that vote-buying will occur only in the context of machine politics. Because citizens have incentives to accept gifts or bribes but then not to vote for the party, vote-buying is only effective in situations where political machines have the capacity to monitor individuals and ensure their compliance. Nichter (2008) argues that vote-buying is targeted at supporters not because of the monitoring abilities of political machines, but rather because parties seek to buy turnout through the mobilization of previously unmobilized party supporters. In their study of the Mexican case, Diaz-Cayeros et al. (2007) compare politicians to investors and argue that investments in clientelistic distribution is more likely in the most electorally risky areas of the country.

Despite the purported pervasiveness of clientelism in Africa, the evidence is mixed on its effectiveness as a political strategy in the electoral context. In an experimental study conducted in Benin, Wantchekon (2003) finds evidence that voters are more responsive to rhetoric that he defines as clientelistic rather than universal. Other empirical studies contradict this result. In a study of Ghana, Lindberg and Morrison (2008) find that voters evaluate candidates based on their policy prescriptions rather than on ethnic or clientelist bases. Similarly, Young (2009) finds no evidence that in Kenya and Zambia clientelism has improved the voteshare of incumbent MPs.

The two studies to examine vote-buying's effect on voter turnout in Africa have produced contradictory results. Bratton's (2008) study of Nigeria finds that exposure to vote-buying decreases the likelihood that an individual votes. He argues that vote-buying and electoral violence create disillusionment amongst the electorate causing them to exit the political process. In a randomized field experiment in Sao Tome and

Principe, Vicente (2008) finds, on the other hand, that vote-buying increases voter turnout by "energizing" potential voters. These results suggest that the political and social context of a country will likely condition the effect of vote-buying on voters.

The 2002 Elections in Kenya

Kenya's 2002 presidential and parliamentary elections marked the third since the country's transition to multiparty politics in 1991. The polls were important for multiple reasons. Above all else, the elections marked the first peaceful turnover of executive power since the transition, with Mwai Kibaki of the National Rainbow Coalition (NARC) defeating the candidate of the long-ruling Kenyan African National Union (KANU), Uhuru Kenyatta. At the time, many observers heralded the event as a moment of democratic opening in Kenya. The elections were also the first in which former autocrat and KANU leader Daniel Arap Moi would not be participating. Moi abided by constitutionally mandated term limits and appointed Kenyatta, son of Kenyan independence leader Jomo Kenyatta, as his successor. Also, once fragmented opposition groups overcame historical divisions and united under the umbrella of the NARC and its presidential candidate, Kibaki. Conventional accounts suggest that opposition divisions facilitated Moi victories in the first two elections of 1992 and 1997, and indeed Moi was victorious in these polls with well less than 50 percent of the vote (Ndegwa, 2003).

The elections also marked a newfound independence and assertiveness for the Kenyan Electoral Commission (Ndegwa, 2003). In previous elections the independence of the commission had been questioned, but in 2002 it took a more active role in ensuring more transparency on election day. The counting of votes and the verification of ballots was conducted at polling places and overseen by observers from parties and the international community, thus making it difficult for any party to steal the election on election day, as many suspect had been done in the past (Ndegwa, 2003).

Yet despite the work of the electoral commission, parties and their supporters still worked to influence—sometimes illegally—the outcomes of the election before the day of the polls. Incidents of violence occurred in the period preceding the election and many Kenyans claim to have been prevented from registering. Political party operatives were also reported to have been offering small amounts of cash in exchange for votes. John Kithongo—the now exiled former permanent secretary for governance and ethics in the Office of the President of Kenya—recalls observing "offerings of cash, T-shirts, and food in exchange for votes" (Githongo, 2007).³

Data and Measures

The majority of the data used in this study are taken from the Afrobarometer Round 3 survey taken in Kenya in 2005. Afrobarometer draws nationally representative samples from each of its target countries and Kenya's Round 3 survey includes data on 1,278 individuals. The dependent variable is a dichotomous measure taking on a value of 1 if the individual voted in the 2002 election and 0 if the person did not vote in the election. I generate this variable from a survey question which asks the following question and allows for the following responses: With regard to the most recent, 2002 national elections, which statement is true for you?: a) You voted in the elections; b) You decided not to vote; c) You could not find the polling station; d) You were prevented from voting; e) You did not have time to vote; f) Did not vote for some other reason; and g) You were not registered.

Sixty-three percent of the survey respondents reported voting in the 2002 elections. The International Foundation for Electoral Systems (IFES) reports that national turnout for the 2002 election was about 57 percent (IFES Election Guide). Voter turnout is therefore higher in my sample but not substantially so. One respondent could not find the polling place, another eight claim to have been prevented from voting,

³ In the same article, Githongo (2007) argues that many Kenyans accept these gifts but then vote for their preferred candidate, an issue that speaks to the monitoring and compliance problems that vote-buying parties face.



144 were too young, five could not remember if they voted or not, and for two individuals the data is missing. Because such individuals may have wanted to vote or claim to have tried to vote, I drop them from the data leaving a sample size of 1,120.

The explanatory (or "treatment") variable of focus is a second dichotomous measure taking on a value of 1 if the individual had in the run up to the 2002 elections been approached by a political party representative and been offered a bribe or a gift in exchange for a vote, and a 0 if the individual had not been approached. I generate this variable using another question from the Afrobarometer survey that asks: And during the 2002 elections, how often (if ever) did a candidate or someone from a political party offer you something, like food or a gift, in return for your vote? Respondents could answer "never," "once or twice," "a few times," "often," or "don't know." Just over half of those surveyed (about 56 percent) report that they had never been approached by a candidate, about 15 percent report having been approached "once or twice", 14 percent report having been approached "a few times," and 12 percent report having been approached "often." About 40 percent of respondents claim therefore to have been approached at least once. Such individuals are assigned a value of 1 on the vote-buying variable while all others are assigned a value of 0.4

It is important to note that respondents do not report whether they accepted the bribe or gift. The data also contain no information about the magnitude of the gift. Rather, we only know that a party representative or supporter with an offer to exchange money or resources for a vote approached them. As such, it is perhaps best to interpret the treatment as exposure to vote-buying or as exposure to a vote-buying offer.

The survey question also does not provide information about the precise timing of the vote-buying offer. If vote-buyers targeted voters while they were on the way to the polls (having already decided and made the effort to vote), then the statistical results will overstate vote-buying's influence on voter behavior. Unfortunately, the present data do not allow me to fully rule out this possibility. Yet that about two-thirds of those who reported being approached by a vote-buyer claim to have been approached "a few times" (14 percent of all respondents) or "often" (12 percent of all respondents) illustrates that much votebuying occurs before election day. Moreover, anecdotal evidence from the 2002 election as well as other elections in Kenya suggests that a great deal of vote-buying occurs in the days and weeks leading up to the elections. In an interview with a New York Times correspondent in the period before the 2002 elections, one citizen reported: "A NARC agent stopped me at a bus stop and asked me who I was voting for. When I said KANU, he offered me 500 shillings [about 6 U.S. dollars] for my vote" (Lacey, 2002). Another Kenyan described his vote-buying experience before election day as follows: "A man approached me in Naivasha at a bar and asked me what party I'm from. He said he's an agent for KANU and would buy my vote for 700 shillings" (Lacey, 2002). A study conducted by a Kenyan anti-corruption organization on the 2007 elections estimates that in the two weeks leading up the elections "candidates [spent] about 60 to 80 thousand shillings per day on distribution of money and other benefits to voters" (CAPF, 2007). These anecdotes do not rule out the possibility that Kenyans were approached by votebuyers on the way to polls, but they do indicate that substantial vote-buying attempts are generally made in the days and weeks leading up to elections.

Like any study that uses survey data, there are other potential sources of bias in the measures I employ. People tend to overstate their voting histories and to respond to surveys in ways that they believe might please the enumerator. Kenyans are exposed to a normative discourse suggesting that voting is the right thing to do and so there is the potential therefore for people to report having voted, even if in reality they

⁵ One thousand Kenya Shillings is about fifteen U.S. dollars.



⁴ I also run the statistical models using as a dependent variable the disaggregated vote-buying measure. The substantive results are similar and so I do not present them here. Capturing the treatment variable dichotomously also facilitates the usage of the propensity score matching techniques that I present below.

did not. Yet that the turnout percentage in the sample data resembles the turnout percentage in the population is reassuring and suggests that over-reporting may not be a major problem (though over-reporting might explain the slightly higher turnout percentage in the sample). Moreover, anti-vote-buying campaigns are common in Kenyan elections. I therefore expect that individuals would tend to under-report their experiences with vote-buying when confronted by in-person survey questions.

The extent to which these potential tendencies for over- and under-reporting are damaging to the inferences drawn in the study depends on which direction we expect these tendencies to bias the results. In this regard, the results are relatively safe from major distortion due to misreporting. Table 1 presents four different types of individuals labeling them by their true actions. In the upper-left box, the individual was both approached and offered a bribe and turned out to vote. If such a person failed to report that they were approached, as we might logically expect, such a failure would bias the finding toward a null result. It is possible that the person would report not having voted, which in combination with a failure to report having been approached could be problematic, but such a situation is unlikely as respondents are far more likely to over rather than under report their voting history. For those in the bottom left cell, we would not expect them to misrepresent their histories given their behavior. In the lower right cell, claiming to have voted when one did not would again bias the results toward a null result. The only cell that poses a potential problem is the top right, where those individuals that were approached and offered a bribe and did not vote might misrepresent their voting history, potentially inflating our estimate of the effect of vote-buying. Yet this potential bias is attenuated by the fact that those who feel socially pressured to say that they voted in the past election are also likely those that feel socially pressured to say that they did not interact with vote buyers. The top-right cell individuals who misreport are likely to answer each question falsely, giving the impression that they were not approached and did vote. As before, these responses would bias the estimated effect of vote-buying toward zero.

Table 1: Potential Sources of Bias

Approached and Voted	Approached and No Vote
Not Approached and Voted	Not Approached and No Vote

The statistical models also include a number of control variables to approximate other potential benefits from voting as well as to capture those individual characteristics that the literature has suggested are important turnout determinants. An individual's level of education, for instance, may be predictive of voting. Though most studies point to a positive relationship between education and the probability that someone votes (more education = more likely to vote), Blaydes (2006) study of voter turnout in Egypt suggests that in situations where vote-buying is prevalent, those with lower education might be most likely to vote. To control for the potential effect of education level I create a series of dichotomous variables; one marking those individuals with no formal schooling, one marking those with only primary education, one marking those with only secondary education, and one marking those with any post-secondary education.

While education might be predictive of an individual's decision to vote, so too might be their economic condition. As suggested in the theoretical literature, poorer voters might be more susceptible to vote-buying because even small transfers are valuable to them. To test for this possibility, I run some model specifications that interact the economic conditions measures with the vote-buying variable. I use several measures of an individual's economic condition. One measures whether the respondent has a cash income. Another two measure whether the respondent or the respondent's family have gone without sufficient food for substantial parts of the previous year.

The competitiveness of the election may also be relevant to potential voters. We might speculate that the closer the election, the greater the perceived probability of being the pivotal voter. As the perceived probability of being pivotal increases, so too does the expected benefit of voting. Moreover, the competitiveness of a district might matter for vote-buyers. Kenya has a peculiar electoral system for the election of the president that requires the winner to earn at least 25 percent of the vote in five of the country's seven provinces. Political parties therefore have incentive to target campaigns to broad sections of the country and to win votes from areas outside of their strongholds. To control for these factors, I create a variable, *margin*, which is simply the percentage point difference in the proportion of votes won by the winner in a district and the proportion of votes won by the runner-up. I assume that potential voters can estimate how close an upcoming election might be and use results from the 2002 presidential elections to create the variable. I aggregate constituency-level presidential election data up to the district level and integrate the election margin variable into the individual-level dataset.

I also include control variables indicating the political party preference of the individual. I create four dummy variables: one for the NARC, the main opposition coalition and eventual winner of the election; one for KANU, the incumbent party; one for the Liberal Democratic Party (LDP); and a fourth for those who support the more minor parties or who did not express allegiance to any particular party. Because different parties might have different mobilizing strategies, supporters of the opposition might be treated differently than supporters of government, and because one's decision to vote might quite reasonably be related to one's political allegiance, I include these variables as controls in several of the model specifications.

Other studies suggest that individuals might derive benefits from voting because of its purported intrinsic value (Riker and Ordeshook, 1968; Gerber et al., 2008). When people value democracy and the act of voting, their utility from voting increases and they are more likely to accept the costs. Measuring the extent to which an individual intrinsically values voting is difficult, and measuring it exactly is certainly not possible. I therefore approximate an individual's intrinsic benefit from voting by using their opinion about democracy as the best form of government. I suggest that those who claim that "democracy is preferable to any other kind of government"—rather than "in some circumstances, a non-democratic government can be preferable" or "for someone like me, it doesn't matter what kind of government we have"—have a greater belief in the intrinsic value of democracy. I construct a dichotomous variable marking each of these individuals with a 1. A continuous measure would be preferable, but the data do not permit it.

Respondents were also asked whether they believed that politicians are influenced by people like them, and could answer "never," "sometimes," or "always." Using this question I create a variable that captures an individual's political self-efficacy. Those who believe that people like them never influence politicians are given a 1 while others are given a 0. Because one's belief in her or his ability to influence politicians might reasonably have an effect on their decision to participate in politics, I include this variable as a control in several of the statistical models.

Finally, I also include controls for the age and gender of the respondent, as well as whether respondent lives in an urban or rural area.

Who Voted and Whose Votes Were Being Bought?

⁶ I note that this probability is perceived because even in the closest of elections the probability of being the pivotal vote remains negligible.

⁷ There were 210 electoral constituencies in Kenya in 2002. Each district contains between one and five constituencies. I aggregate the data up to the district level because Afrobarometer does not collect electoral constituency information. Many thanks to Liz Carlson for providing the election results data.

Vote-buying attempts are fundamentally strategic acts on the part of political parties. Estimating the causal effect of vote-buying on individual voter turnout therefore requires a systematic analysis of the vote-buying assignment mechanism. I therefore first describe the data with a particular focus on the characteristics of voters and non-voters, as well as those who were approached by vote-buyers. This section ends with a statistical analysis designed to more fully identify the strategic logic of vote-buying from the perspective of vote-buying parties.

In the sample, about 33 percent of individuals claim the NARC as their party of choice. Twelve percent support the Liberal Democratic Party (LDP), 10 percent support KANU, and about 36 percent claim no attachment. The turnout rate is slightly higher for supporters of the NARC, which is perhaps not surprising given the excitement about NARC's potential to defeat KANU. Supporters of KANU and the LDP turned out at rates of 66 and 68 percent, respectively. Vote-buyers targeted only 30 percent of NARC supporters, well below the national rate of over 40 percent, while they targeted about 60 percent of LDP supporters.

Most Kenyans in the sample have at least some primary or secondary schooling. Only about 10 percent have had no formal schooling, while 14 percent have had at least some post-secondary education. Turnout is similar among Kenyans of all education levels, with between 61 and 68 percent of people voting. Similarly, rates of vote-buying are about the same across each educational level. There is thus no initial evidence that vote buyers systematically target less educated individuals or that more or less educated individuals are more likely to vote. As for the other control variables, each category of individuals turn out to vote and are targeted by vote buyers at rates similar to that of the national rate. Those who had not gone without sufficient food were targeted for vote-buying at a slightly lower rate. Moreover, the turnout rate among women was substantially lower than it was among men, while men were more likely to be targeted by a vote buyer than were women.

Table 2 presents results from probit analyses conducted to answer the question of who gets targeted by vote buyers. In this regard, a number of interesting relationships stand out. In the first place, those who claim to have gone without sufficient food in a recent period—a reasonable measure of livelihood—are more likely to be targeted by a vote buyer. We might therefore infer that poorer voters are more likely to be the targets of vote-buying efforts. Men are also far more likely to be targeted than women. The education level variables are not, however, statistically significant nor are the coefficients substantively big. Thus an individual's education level is not a strong predictor of being a vote-buying target.

Table 2: Probit Analyses of Vote-Buying's Determinants

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	-0.29 *	-0.25 *	-0.13	-0.12 *	-0.32 *
•	(0.07)	(0.06)	(0.09)	(0.06)	(0.16)
Cash income	-0.06				-0.02
	(0.08)				(0.10)
Insufficient food	0.32 *				0.37 *
	(0.08)				(0.09)
Male		0.20 *			0.20 *
		(0.08)			(0.09)
Urban		0.12			0.14
		(0.08)			(0.11)
Age		-0.00			-0.00
		(0.00)			(0.00)
No ed.			-0.02		-0.06
			(0.15)		(0.20)
Primary ed.			-0.02		-0.04
			(0.11)		(0.15)
Secondary ed.			0.02		0.12
			(0.11)		(0.14)
KANU				-0.02	-0.13
Supporter					
				(0.13)	(0.15)
NARC				-0.20 *	-0.22 *
Supporter					
				(0.09)	(0.10)
LDP Supporter				0.46 *	0.46 *
				(0.12)	(0.15)
Vote margin					-0.27 *
					(0.12)
N	1120	1120	1120	1120	838
AIC	1529.97	1539.15	1548.33	1520.20	1128.43
BIC	1590.22	1619.49	1628.67	1600.54	1374.44
Log L	-752.99	-753.58	-758.17	-744.10	-512.22

Standard errors in parentheses

Dependent var.: Dichotomous measure of whether an individual was approached by a vote-buyer.

The results concerning the political variables are also illuminating. While being a supporter of KANU is not a significant predictor, supporters of the opposition NARC are far less likely to be targeted than are the supporters of other parties or those who claim no allegiance. If the government was the actor most involved in vote-buying, as many reports suggested, then they were less likely to target NARC supporters. LDP supporters, on the other hand, are substantially more likely to have been a vote-buying target. This may have been because the LDP was not considered a serious contender in the election, and so their supporters may have been perceived to be attractable. Finally, an increase in the political competitiveness of an individual's electoral district (the equivalent of a decrease in the vote margin variable) is statistically and substantively predictive of an increase in the probability that a vote-buyer targets that individual. These results suggest that political parties were more likely to engage in vote-buying in the most politically competitive districts and to target the poor, men, and the supporters of a presumably competing party with little chance of electoral victory. The finding runs contrary to a number of influential theoretical predictions, including those of Cox and McCubbins (1986), who argue that private goods (like bribes or gifts) are more likely to be targeted toward core supporters; Stokes (2005),

^{*} indicates significance at p< 0.05

who argues that vote-buying will only occur where political machines are strong enough to monitor voters and ensure compliance; and Nichter (2008), who argues that parties do not buy votes but turnout, and seek to do so in places where they have the most unmobilized support.

Model Estimation and Results

What, then, is the effect of vote-buying on an individual's decision to vote? I fit a number of probit models using different covariate combinations. Because we are only interested in the effect of vote-buying, this strategy is defensible. Table 3 presents results from a number of probit specifications. The estimated effect of having been offered a bribe or a gift in exchange for a vote on the probability that an individual does vote is stable across each of the specifications. The coefficient estimate is consistently positive and statistically significant at conventional levels. Moreover, the magnitude of the coefficient is stable across the specifications. To estimate the substantive effect of a vote-buying attempt on the probability that an individual votes, I use Zelig (Imai et al., 2007) to simulate predicted probabilities of voting for "treated" and "un-treated" individuals in each of the specifications. The estimates suggest that a vote-buying attempt increases the probability of voting by about 10 percentage points (the 95 percent confidence intervals spans the interval from about 5 percent to about 15 percent).

The results also suggest that one's assessment of the intrinsic value of democracy plays a role in determining an individual's decision to vote. In all specifications the democratic belief variable is statistically significant and positive, and its magnitude is generally similar to that of the vote-buying variable. Those who believe democracy is always the best form of government are therefore about 10 percentage points more likely to vote than those who do not. The data also illustrate that individuals who associate themselves with the two most competitive parties are substantially more likely to vote than their counterparts who do not associate strongly with a political party. In particular, association with the main opposition coalition, the NARC, is strongly predictive of turnout. This finding is consistent with the results of Kuenzi and Lambright (2005), who argue that linkages to political parties strongly predict voting in Africa.

⁸ As a robustness check, I also conduct a Bayesian analysis with "skeptical" priors (in other words, priors that submit that the effect of vote-buying on turnout is strongly negative). The data overwhelm even the most skeptical of priors, and the point estimate of the coefficient and the 95 percent credible interval are essentially identical to the point estimates from the classical probit analysis as well as the 95 percent confidence intervals.

Table 3: Probit Analyses of Individual Voter Turnout

	Model 1	Model 2	Model 3	Model 4	Model 5
(Intercept)	0.48 *	0.25 *	0.25 *	0.10	-0.24
•	(0.05)	(0.09)	(0.12)	(0.13)	(0.20)
Vote buy	0.31 *	0.30 *	0.29 *	0.27 *	0.34 *
	(0.08)	(0.08)	(0.08)	(0.08)	(0.10)
Democratic		0.30 *	0.30 *	0.20 *	0.26 *
belief					
		(0.09)	(0.09)	(0.10)	(0.12)
No political		0.03	0.02	0.01	-0.01
efficacy					
		(0.08)	(0.08)	(0.09)	(0.10)
Cash income			-0.13	-0.10	-0.18
			(0.08)	(0.09)	(0.11)
Insufficient food			0.15	0.12	0.01
			(0.08)	(0.09)	(0.10)
Male				0.50 *	0.42 *
				(0.09)	(0.10)
Urban				-0.14	-0.03
				(0.09)	(0.11)
Age				0.00	0.00
				(0.00)	(0.00)
No ed.					0.27
					(0.21)
Primary ed.					0.14
					(0.16)
Secondary ed.					0.17
					(0.15)
KANU					0.41 *
					(0.17)
NARC					0.40 *
					(0.11)
LDP					0.21
					(0.16)
Vote margin					0.01
					(0.13)
N	1120	1120	1120	1120	838
AIC	1297.36	1290.62	1289.52	1254.51	951.19
BIC	1337.53	1370.96	1410.02	1435.27	1253.97
Log L	-640.68	-629.31	-620.76	-591.25	-411.59

Standard errors in parentheses

Dependent variable: Dichotomous measure indicating whether individual voted in 2002 elections. Dependent variable: Dichotomous measure of whether an individual voted in the 2002 elections

To test the hypothesis that vote-buying will have a greater impact on poorer individuals, I interact the vote-buying variable with two indicators of material wealth: whether the person has a cash income and whether the person has gone without sufficient food for a substantial period of time. Column 1 of Table 4 presents these results, which do not suggest any difference in the effect of vote-buying for poorer or richer individuals.

I also test the hypothesis that the influence of vote-buying might be different depending on the education level of the individual approached. Column 2 of Table 4 presents the results from this analysis, in which the higher education dummy variable is the omitted reference category. The coefficients on the three

^{*} indicates significance at p < 0.05

interaction terms thus capture the difference in the effect of vote-buying between those with higher education and those with the other three educational levels. The results suggest that vote-buying's effect is conditioned by an individual's level of education. To facilitate interpretation, Figure 1 presents the estimated effect (with 95 percent confidence intervals) of a vote-buying attempt on the probability that an individual votes in each of the four education categories (no formal schooling, only primary education, up to secondary education, post-secondary education). The estimated effect of vote-buying is highest amongst those with no formal schooling. The effects for those with primary and secondary education are similar and are comparable to the aggregated effect estimated above. Yet the data suggest that vote-buying has no effect on the probability that a highly educated person will vote.

Table 4: Probit Interaction Models to Determine the Conditioning Effect of Wealth and Education on Vote-Buying's Influence on Individual Turnout

	Wealth Model	Education Model	
(Intercept)	0.08	0.22	
	(0.13)	(0.16)	
Vote buy	0.30	-0.13	
	(0.16)	(0.20)	
Insufficient Food	0.17	` '	
	(0.11)		
Cash Income	-0.08		
	(0.11)		
Male	0.51 *	0.53 *	
	(0.09)	(0.09)	
Democratic Belief	0.18	0.20 *	
	(0.10)	(0.10)	
Vote buy*Insufficient Food	-0.07		
-	(0.17)		
Vote buy*Cash Income	0.01		
-	(0.17)		
No Ed.		-0.08	
		(0.21)	
Primary Ed.		-0.14	
		(0.16)	
Secondary Ed.		-0.16	
		(0.17)	
Vote buy*No Ed.		0.65 *	
		(0.33)	
Vote buy*Primary Ed.		0.44	
		(0.24)	
Vote buy*Secondary Ed.		0.48	
		(0.25)	
N	1120	1120	
AIC	1257.67	1258.31	
BIC	1418.35	1459.15	
Log L	-596.84	-589.16	

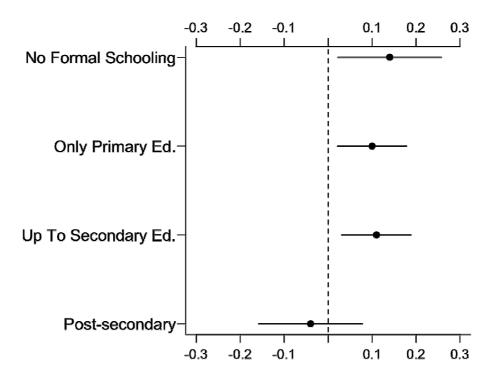
Standard errors in parentheses

Dependent var.: Dichotomous measure of whether an individual voted in the 2002 elections

^{*} indicates significance at p < 0.05

⁹ I use simulation to produce the estimated probabilities.

Figure 1: Estimated Effect (with 95 percent confidence interval) of Vote-buying on the Probability of Voting, by Education Level. The figure illustrates that vote-buying has no predicted effect on the probability that a highly educated person will vote, while vote-buying has a disproportionate impact on the probability that the least educated individuals will vote.



Difference in Probability of Voting [Pr(V | Buy) - Pr(V | No Buy)]

Estimating the Causal Effect of Vote-buying Using Matching

A key hurdle one faces in estimating the causal effect of vote-buying on turnout arises from the fact that political parties do not buy votes randomly, but rather strategically. If vote-buyers target those who are also more likely to turnout—perhaps because they know the returns to their investment are likely highest amongst such people—then the standard statistical analysis will tend to overestimate vote-buying's influence. A solution to this inferential problem lies in pre-processing the data using a method of propensity score matching that links the pre-treatment covariates to vote-buying strategies. ¹⁰

Pre-processing the data using matching has a number of advantages. Ho et al. (2006) argue that pre-processing data using matching methods provides an effective way of reducing the model dependency of causal estimates. One generates propensity scores by calculating the probability that each individual is in the treated group (in this case an exposure to a vote-buying attempt), given the observed pre-treatment covariates. Individuals are then matched using one of a number of methods based upon these scores—methods include "exact matching" and "nearest neighbor matching"—and observations that cannot be matched are dropped from the processed dataset. This adjustment to the data reduces the relationship between the treatment of focus and the pre-treatment covariates and the resulting estimated causal effect becomes less dependent on the functional form of the parametric model used in the analysis. In instances where pre-processing completely eliminates the relationship between the treatment and other covariates, the estimated causal effect will be the same, regardless of the parametric form (Ho et al., 2006). As such, pre-processing the data and then re-running the probit analyses serves as both a robustness check and a method for best estimating the causal effect of vote-buying in the absence of random treatment assignment.

Before proceeding, it is important to note that propensity score matching will not solve problems of omitted variables bias. Pre-processing the data helps to solve the inferential problems caused by the strategic allocation of vote-buying, and as such is an improvement upon the probit statistical models run on the entire data set. Unfortunately, however, we can only match on the observable characteristics of individuals that are captured in the Afrobarometer survey. Thus, if vote-buyers target those who they believe are most likely to turnout to vote for reasons unrelated to the pre-treatment covariates introduced into the calculation of the propensity scores, some bias in the estimation of vote-buying's causal effect may remain. Therefore it is best to understand propensity score matching as a method with which to improve, rather than completely solve, the inferential problem posed by the non-random allocation of vote-buying offers.

I use the method of exact matching,¹¹ using as pre-treatment covariates the education level indicators, the political party affiliation indicators, the economic indicators (cash income and insufficient food), as well as the gender, urban, and age variables.¹² The process discards 364 individuals that cannot be matched

 $^{^{10}}$ For a complete theoretical explanation of propensity score matching see Rosenbaum and Rubin (1985) and Ho et al. (2006)

¹¹ There is no "right" method to use. It is best to achieve the greatest amount of balance and overlap in the distributions of pre-treatment covariates in the treatment and control groups without dropping too much of the data. This will vary from study to study.

¹² The proper method for selecting variables to include in a matching procedure is contested in the statistical literature. Conventional advice suggests including as many pre-treatment (as opposed to intervening) covariates as possible into the matching procedure. Yet Pearl (2000) illustrates that the inclusion of certain types of covariates can induce bias. I therefore run the matching procedure using more condensed sets of covariates. The results are not influenced by these differences in matching procedure and so I do not report them here. In an alternative approach not reported in this paper, I also match using the vote margin variable. The substantive results from the analysis are unchanged when analyzing that pre-processed data. Because I use electoral returns from the 2002

using each of the control variables from the probit models, leaving a sample of 756 individuals in the preprocessed data. ¹³

Table 5 presents results from probit analyses run on the pre-processed data, which indicate that the initial findings are robust to reductions in model dependency. Moreover, they suggest that the results from the initial analyses may underestimate the causal effect of vote-buying on turnout. I again use simulation and predict that individual's approached by a vote buyer are about 14 percentage points more likely to vote (95 percent confidence interval runs from about 8 percent to about 20 percent). The average treatment effect on the treated (ATT), computed using a simple difference of means test, produces a similar estimate (0.14 with 95 percent confidence interval running from 0.07 to 0.20).

Table 5: Probit Analyses of Individual Voter Turnout with Pre-Processed Data

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
(Intercept)	0.40 *	0.18	0.19	0.07	-0.02	-0.10
	(0.06)	(0.12)	(0.17)	(0.18)	(0.23)	(0.23)
Vote buy	0.41 *	0.41 *	0.40 *	0.40 *	0.40 *	0.42 *
	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)	(0.10)
Democratic Belief		0.27 *	0.25	0.10	0.14	0.08
		(0.12)	(0.13)	(0.13)	(0.14)	(0.14)
Political efficacy		0.02	-0.01	-0.01	-0.02	0.05
		(0.11)	(0.11)	(0.11)	(0.11)	(0.11)
Cash income			-0.14	-0.05	-0.08	-0.08
			(0.11)	(0.11)	(0.12)	(0.12)
Insufficient food			0.16	0.11	0.09	0.06
			(0.10)	(0.11)	(0.11)	(0.11)
Male				0.50 *	0.51 *	0.45 *
				(0.11)	(0.11)	(0.11)
Urban				-0.09	-0.05	-0.02
				(0.12)	(0.13)	(0.13)
No formal ed.					0.22	0.20
					(0.25)	(0.26)
Primary ed.					0.12	0.08
					(0.19)	(0.19)
Secondary ed.					0.03	0.01
					(0.18)	(0.18)
KANU supporter						0.21
						(0.21)
NARC supporter						0.39 *
						(0.12)
LDP supporter						0.13
						(0.20)
N	756	756	756	756	756	756
AIC	887.31	886.45	886.87	867.58	872.49	867.53
BIC	924.33	960.50	997.95	1015.68	1076.12	1126.70
Log L	-435.65	-427.22	-419.44	-401.79	-392.24	-377.77

Standard errors in parentheses * indicates significance at p < 0.05

elections and voting occurs after the vote-buying offer has been made, vote-buying may have an effect on the vote margin in a district. As such, the vote margin variable is not a pre-treatment covariate. As the results are not influenced by the removal of vote margin from the matching procedure, I present the results from the data pre-processed without that variable because it is the most appropriate approach given the influence that vote-buying may have on the election result.

¹³ Note that though in general more data increases the efficiency of statistical estimates, there tend to be efficiency *gains* from discarding data when matching is used.



Dependent variable: Dichotomous measure of whether an individual voted in the 2002 elections.

Explaining Vote-Buying's Influence on Turnout

These results present a puzzle. Where the ballot is secret and voting is voluntary, a pre-election material transfer should not on its own influence the probability that the expected benefits to voting might exceed the costs. As long as the probability of being a pivotal voter and the costs to voting remain fixed, no pre-election bribe should influence a voter's decision-making calculus. Yet this study illustrates that in Kenya such transfers do have a sizeable impact. The sections that follow present potential explanations linking vote-buying and turnout, and explore their empirical support.

Monitoring and Punishment Mechanism

One resolution stems from the fact that monitoring turnout is an easier task for the parties than is monitoring vote choice (Nichter, 2008). If parties can effectively monitor the turnout of those whose votes they have purchased—or at least enjoy the perception that they have such capacity—and can issue credible punishment threats against non-compliance, such factors are likely to alter the decision making calculus of potential voters. Specifically, monitoring and punishment capacity raise the probability of a non-compliant citizen being discovered while simultaneously increasing the costs to citizens of non-compliance.

Reports from elections observers suggest that Kenyan parties systematically monitored turnout and attempted to monitor vote choice during the 2002 elections. In Kenya, as in many countries, political party agents are present in most, if not all, polling stations on election day. The presence of party agents provides parties with monitors at the very local level, and often these party representatives are members of the communities in which the polling stations are located, providing them with the local knowledge with which to effectively monitor voter behavior.

Kenyan parties also took advantage of legal provisions allowing for "assisted voting." According to Kenyan electoral law, those individuals who feel they cannot properly vote by themselves are permitted to bring into the voting booth an individual of voting age to assist them. According to election reports, party agents were often involved in assisted voting and appear to have tried to use the rule to their advantage. Representatives from the Carter Center observed that:

In practice it was not uncommon to see several party agents as well as the presiding officer crowding around the voting booth to observe the voting process. In one polling station . . . nearly all women voters claimed illiteracy, requested assistance, and received assistance from the presiding officer (Carter Center Report, 29-30).

The same election observers go on to note:

In several cases assisted voting was conducted in full view of party agents, observers, and others in the polling station. In other cases, it appears that the provision of assisted voting for illiterate voters may have been abused, with an unusually high number of voters demanding such assistance in some stations and few or none in others (Carter Center Report, 33).

The use of assisted voting provisions to violate the secrecy of the vote and monitor voting behavior is not a strategy unique to Kenya. Lehoucq (2007) reports that in Mexico, for instance, the Institutional Revolutionary Party relied on such rules to monitor citizen vote choice after the secret ballot was adopted.

These observations provide a different lens through which to analyze the finding that the least educated voters are most influenced by vote-buying. These observations suggest that less educated people may be the easiest voters to monitor. The least educated are the most likely to be illiterate or require voting assistance, opening the door for party agents to more closely monitor whether they vote and potentially even how they vote. Thus the least educated might be more influenced by vote-buying not because their

circumstances render them "easier to buy," but rather because they are likely the easiest individuals for vote-purchasers to monitor.

While parties used strategies to monitor voters, Kenyan citizens had legitimate reasons to fear violence on the part of parties and their allies. During the 1992 and 1997 elections, militant youth organizations both formally and informally affiliated with KANU were active during the campaign, while ethnic cleansing attempts occurred in some areas of the country (Laakso, 2007). Though the 2002 elections were generally considered far more peaceful than the previous two multiparty elections, the fact of recent election-related violence certainly weighed heavily on the minds of many Kenyans. Moreover, sporadic incidents of violence—for instance in the Rift Valley where youth groups threatened individuals with home-made weapons—occurred in the pre-election period. And the involvement in politics of such violent criminal groups as the *Mungiki* rendered the possibility of violence palpable. As such, the potential costs of violating, or being perceived to have violated, a vote-buying bargain could have been immense.

How does vote-buying relate to individual perceptions of party monitoring capacity and the possibility of violent punishment? To examine the relationship of vote-buying to an individual's perception of these issues, I return to the Afrobarometer data and conduct two ordered probit analyses. I first take advantage of an Afrobarometer question that asks respondents whether they think the "freedom to choose who to vote for without feeling pressured" is worse, better, or about the same as in years past. Though the question is not ideal for my purposes, it does get at the extent to which individual's feel that parties and other political agents can influence their vote. As such, the question provides a blunt measure of citizens' perceptions of party monitoring capacity. To examine the effect of vote-buying on citizen perceptions of political party involvement in violence, I use an Afrobarometer question that addresses the relationship of political parties and party competition to violence in Kenya. The question asks whether "political party competition leads to violent conflict" and respondents could answer "always," "often," "rarely," or "never." The question is a blunt measure of the concept I seek to operationalize, but it does probe the extent to which individuals believe that parties are responsible for violence, a rough proxy for individual perception of the potential costs to violating a vote-buying bargain.

Table 6 presents results from the ordered probit analyses. Vote-buying has a substantial and statistically significant effect on respondents' perceptions of their freedom from pressure as well as on their perceptions of political parties and violence. To facilitate interpretation, I use Zelig (Imai et al., 2007) to simulate the models' predictions of vote-buying's effect on citizen perceptions. Figure 2 illustrates that those who were approached by a vote-buyer are about 10 percentage points more likely to believe that freedom from political party pressure on vote choice is either the same or worse, and almost 15 percentage points less likely to believe that it has improved. Figure 3 illustrates that those who were approached by a vote-buyer are between 10 and 15 percentage points more likely to believe that political party competition "always" leads to violence, while the same individuals are about 15 percentage points less likely to believe that such competition "rarely" or "never" leads to violence.

¹⁵ Note that the "same" is not a positive assessment given the transgressions of Kenyan political parties in the 1992 and 1997 elections.



¹⁴ For a detailed discussion of Kenyan vigilante groups and criminal organizations as well as their connection to politics, see Anderson (2002)

Table 6: Ordered Probit Models Testing Relationship of Vote-busing to Citizen Percentions

Table 6: Ordered	Probit Models Testing Relationship of Vo	Party Violence	
Vote Day	-0.42 *	0.40 *	
Vote Buy			
I cc · · · · · · · · ·	(0.09)	(0.08)	
Insufficient Food	-0.05	0.07	
	(0.10)	(0.08)	
Cash	-0.11	0.08	
	(0.10)	(0.08)	
Male	-0.02	-0.03	
	(0.10)	(0.08)	
Democratic Belief	0.24 *	-0.15	
	(0.11)	(0.10)	
Political Efficacy	0.04	-0.08	
	(0.10)	(0.08)	
Urban	-0.24 *	0.37 *	
	(0.11)	(0.09)	
No Ed.	0.32	0.26	
	(0.22)	(0.17)	
Primary Ed.	0.03	0.07	
	(0.16)	(0.13)	
Secondary Ed.	-0.04	0.07	
	(0.14)	(0.12)	
KANU Supporter	-0.37 *	-0.12	
	(0.15)	(0.13)	
NARC Supporter	0.29 *	0.07	
Trince Supporter	(0.12)	(0.09)	
LDP Supporter	-0.28	0.13	
LDI Supportei	(0.15)	(0.13)	
Vote Margin	0.37	0.13)	
vote Margin			
NT.	(0.22)	(0.17)	
N	838	838	

 ${\it Standard\ errors\ in\ parentheses}$

* indicates significance at p< 0.05 Column 1 Dep. Var: Is Freedom to Vote Without Pressure Better Than in Previous Years?

Column 2 Dep. Var: Does political party competition lead to violence?

Figure 2: Estimated Effect (with 95 percent confidence interval) of Vote-buying on Perception of Political Party Pressure on Vote Choice. Afrobarometer question: *Is "freedom to choose who to vote for without feeling pressured" better, worse, or the same as a few years ago?* The figure illustrates that those who were approached by a vote-buyer were far less likely to report that freedom to vote without pressure has gotten better.

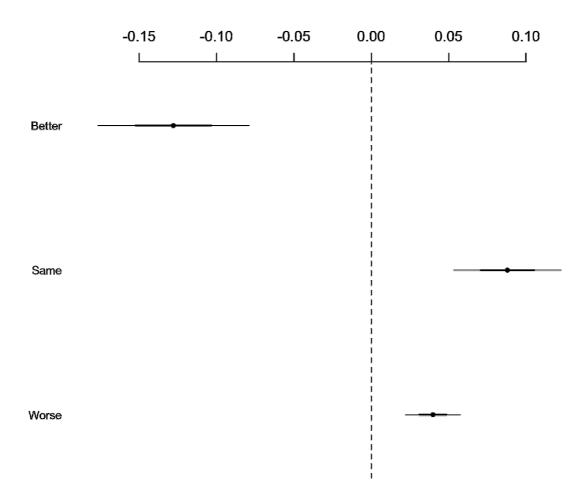
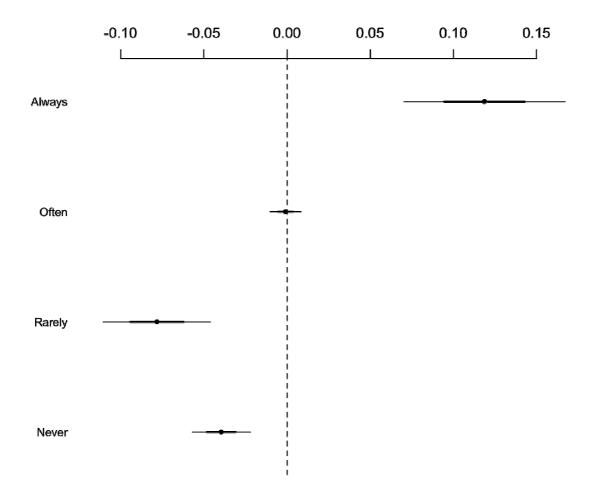


Figure 3: Estimated Effect (with 95 percent confidence interval) of Vote-buying on Perception of Violence and Political Party Competition. Afrobarometer question: *Does competition between political parties lead to violent conflict?* The figure illustrates that those who were approached by a vote-buyer were far more likely to believe that competition between political parties always leads to violence.



There are several ways to interpret this evidence. Vote-buying could have a direct effect on individual perceptions. In amplifying both the perceived probability of being discovered of non-compliance and the perceived costs of non-compliance, vote-buying would then influence the decision-making calculus of potential voters, making them more likely to turnout. It may also be that vote-buyers systematically target people who have these types of perceptions; as such individuals are the least likely to defect from a vote-buying bargain. Or these forces may be mutually reinforcing. Regardless, the evidence is suggestive of vote-buying's impact on individual decision-making and of party vote-buying strategy.

Credibility Signaling Mechanism

An alternative explanation relates to the signals that vote-buying might send to potential voters. In such low-information environments as Kenya's, information about politician performance, behavior, and credibility is difficult for voters to attain. Vote-buying provides politicians and parties with a method to

convey signals about their capacity in these areas. A pre-election gift can signal to voters the credibility and commitment of the vote-buying politician as well as the politician's willingness to distribute resources to supporters, creating the expectation that compliant voters might likely receive future benefits. To put it simply, the receipt of food, supplies, or money from a politician before an election might signal to voters that they will receive future benefits, contingent on the electoral success of the gift giver.

Scholars have suggested that vote-buying might signal the credibility of the vote-buying politician and create voter expectations of future benefits. Van de Walle (2003), for instance, questions the extent to which parties in Africa have the capacity to monitor compliance, and cites studies of Benin and Nigeria which suggest that pre-election transfers are more symbolic and ritualistic. Schaffer (2002) finds support for this view of clientelism in ethnographic studies of the Philippines and Taiwan. Such studies suggest that vote-buying is more than an economic transaction, but also a ritual signaling the commitment that the vote buyer has to the recipient. These findings resonate with a formal model by Keefer and Vlaicu (2008) that characterizes clientelism as a cost-effective method for politicians to build credibility. Similarly Robinson and Verdier (2002) argue that clientelism is the cheapest way to signal credible commitment in weakly institutionalized systems, and Englebert (2002) argues that patronage provides an effective way of building legitimacy amongst citizens in contexts where state legitimacy is low.

To test the hypothesis that vote-buying influences voter perceptions of politician credibility, I return to the Afrobarometer data and use a survey item that asks: *In your opinion, how often do politicians keep their campaign promises after elections?* Using responses to this question, I create a dichotomous measure of politician credibility perception. I code those who believe that politicians "always" or "often" keep their campaign promises as having positive perceptions of credibility, while those who believe that politicians "rarely" or "never" are coded as having negative perceptions.

Table 7 presents results from probit analyses designed to identify the relationship of vote-buying to individual perception of politician credibility. Consistent with the hypothesis that exposure to vote-buying improves individual perception of politician credibility; in each model the coefficient on the vote-buying variable is positive and statistically significant at the 0.10 level. As such, the probability that an individual believes that politicians fulfill their campaign promises increases with the experience of vote-buying. The evidence is therefore consistent with the notion that vote-buying signals politician credibility and commitment to potential voters.

Table 7: Probit Models of Vote-Buying and Perceptions of Politician Credibility

Table 7. I Toble 1910a	leis of vote-Buying and Perceptions of	·
	Model 1	Model 2
(Intercept)	-0.15 **	-0.15
	(0.05)	(0.20)
Vote buy	0.12 ^	0.14 ^
	(0.08)	(0.08)
Urban		0.04
		(0.09)
No Ed.		-0.40 *
		(0.16)
Primary Ed.		-0.19
•		(0.12)
Secondary Ed.		-0.04
		(0.12)
Cash Income		0.15 ^
		(0.08)
Democratic Belief		-0.00
		(0.10)
Interest in Politics		0.03
		(0.04)
Male		-0.19 *
		(0.08)
NARC Supporter		-0.01
T T T T T T T T T T T T T T T T T T T		(0.09)
KANU Supporter		0.19
		(0.13)
LDP Supporter		0.03
		(0.13)
N	1120	1120
AIC	1546.99	1549.03
BIC	1587.16	1810.13
Log L	-765.50	-722.52

Standard errors in parentheses

Dependent variable: Individual perception of politician campaign promise credibility.

Implications and Conclusion

In this paper I have attempted to identify and explain the relationship of vote-buying to individual voting behavior in Kenya. I find that pre-election material benefits, in the form of vote-buying, are central to understanding why people vote in Kenya. Statistical analyses conducted on individual-level data about Kenya's 2002 presidential and parliamentary elections provide robust support for the notion that vote-buying influences an individual's decision to vote, and I estimate that Kenyans who have been approached by a vote buyer are about 14 percentage points more likely to vote than those who have not.

These results present a puzzle. Why are people more likely to vote after being offered a bribe when they could simply accept the gift and stay home on election day? I propose two possible answers: a monitoring and punishment mechanism, and a credibility perception mechanism. I find tentative support for the notion that political parties in Kenya were active in monitoring voter behavior, and also find statistical evidence suggesting that exposure to vote-buying greatly increases the probability that an individual feels that parties can exert pressure on their vote choice and that parties are involved in violence. This suggests that exposure to vote-buying increases an individual's perception of party monitoring and punishment capacity, a perception likely to affect decision-making about whether to vote. I also find evidence consistent with the politician credibility perception mechanism. Exposure to vote-buying is positively associated with individual perception of politician credibility, suggesting that pre-election gifts serve as instruments for politicians to signal credibility and their commitment to distributing resources to supporters.

[^] significant at p < .10; *p < .05; **p < .01; ***p < .001

The results of the study also shed light on the question of *who* parties tend to target with their vote-buying attempts. I find strong evidence that vote-buying is most probable in the most electorally competitive areas and that male supporters of a somewhat marginal party are most likely to be targeted. Supporters of the strongest opposition coalition, on the other hand, were systematically less likely to be targeted by vote buyers. These results have implications for our understanding of party's distributive strategies. While some models predict that vote-buying and private transfers will be targeted toward core supporters, with whom monitoring is easier and compliance is more likely, these findings suggest that vote buyers may reach outside of their core to attract votes. In fact, that supporters of the LDP were most likely to be approached suggests that vote buyers view potentially "swing" voters as acceptable targets. Thus while vote-buying influences the probability that an individual will vote, patterns of vote-buying in Kenya are not consistent with the strategy of buying turnout from unmobilized supporters (Nichter, 2008).

The study also finds that the least educated citizens are those whose behavior is most influenced by vote-buying. I find that vote-buying has no effect on the probability that a highly educated person will vote, even though vote-buyers target such individuals at rates similar to those who are less educated. Those with no formal education, on the other hand, appear to be most affected by vote-buying. One interpretation of this finding is that through education people come to believe that vote-buying is wrong. ¹⁶

This study's analysis of the mechanisms linking vote-buying to voter behavior suggests two alternative explanations. In the first place, less educated individuals are likely easier for political parties to monitor. Such individuals are most likely to credibly request assistance in registering to vote, getting to the polls, and even voting. There are therefore multiple opportunities in the voting process for party officials to monitor turnout, and potentially even vote choice. Second, less educated individuals may have less access to information about the past behavior and future credibility of politicians. For such citizens, the signals conveyed by vote-buying will weigh more heavily in the decision making process than they will for individuals with a wider range of information sources. As such, their behavior is likely to be disproportionately influenced.

This study also has implications for recent work examining the relationship between clientelism and vote choice in Africa and beyond. Several recent papers argue and attempt to illustrate that clientelism does not play a role in determining vote choice (for example, Young, 2009; Lindberg and Morrison, 2008. Though this may be the case, here I illustrate that clientelistic transfers can still influence electoral outcomes through their effect on peoples' decisions to vote. If political parties do not yet understand that vote-buying encourages turnout, they will surely learn and therefore target their vote-buying efforts toward areas where greater turnout helps them electorally (i.e., places where they are reasonably certain that individuals will vote in their favor). Future research should therefore examine the evolution of vote-buying strategies. As the ballot becomes more secret and opportunities for electoral corruption become scarcer, do vote-buying strategies evolve from attempts to sway swing voters toward the mobilization of politically inactive supporters?

Finally, the results should lead us to reflect on our understanding of democracy and its practice in such countries as Kenya. What does democracy mean when people are induced to participate by pre-election monetary and other rewards? Are such practices harmless "warts" on democracy's surface or substantial threats to the principles of accountability, responsiveness, and "rule by the people" that lie at its heart? If Kenyan anti-corruption activist John Githongo is correct when he argues that, "if you are a politician in Kenya today, people will line up and take your money, your T-shirts, and your food, but they will vote their consciences," then perhaps we should not be too troubled (Githongo, 2007). If he is right, vote-buying is simply a form of political mobilization, and one that we might expect to slowly disappear as parties realize

¹⁶ Or perhaps more educated people are more likely to "take the money and run."

This intuition is consistent with the theoretical model of Grossman and Helpman (1996) that predicts that "uninformed voters" will be the targets most influenced by campaign spending.

its futility in attracting votes. But if Githongo is wrong and vote-buying affects both vote choice and turnout, then political accountability and equality are surely at risk. This is particularly the case given the disproportionate influence of vote-buying on the least educated members of society.

References

Aldrich, J. H. 1993. "Rational choice and turnout." American Journal of Political Science: 246-78.

Anderson, D. M. 2002. "Vigilantes, violence and the politics of public order in Kenya." African Affairs 101 (405):531-55.

Anderson, G. M., and R. D. Tollison. 1990. "Democracy in the Marketplace." In Predicting politics: essays in empirical public choice. Ann Arbor: University of Michigan.

Baek, M. 2009. "A Comparative Analysis of Political Communication Systems and Voter Turnout." American Journal of Political Science 53 (2): 376-93.

Blais, A., and R. K. Carty. 1990. "Does proportional representation foster voter turnout?" European Journal of Political Research 18 (2): 167-81.

Blaydes, L. 2006. "Who Votes in Authoritarian Elections and Why? Determinants of Voter Turnout in Contemporary Egypt." Paper presented at the American Political Science Association Annual Meeting.

Bratton, M. 2008. "Vote buying and violence in Nigerian election campaigns." Electoral Studies 27 (4): 621-32.

Brusco, V., M. Nazareno, and S. C. Stokes. 2004. "Vote-buying in Argentina." Latin American Research Review: 66-88.

CAPF Election Monitoring Initiative. 2007. "Election 2007: Interim Report on National Voter Bribery Survey."

Carter Center. 2003. "Observing the 2002 Kenya Elections." Atlanta, Georgia.

Chen, J., and Y. Zhong. 2008. "Why do people vote in semicompetitive elections in China?" The Journal of Politics 64 (01): 178-97.

Cox, G. W., and M. D. McCubbins. 1986. "Electoral politics as a redistributive game." The Journal of Politics: 370-89.

Cox, J. C. 2004. "How to identify trust and reciprocity." Games and Economic Behavior 46 (2): 260-81.

Diaz-Cayeros, A., F. Estevez, and B. Magaloni. 2007. "Strategies of vote-buying: Social Transfers, Democracy and Welfare in Mexico." Unpublished book manuscript.

Dixit, A., and J. Londregan. 1996. "The determinants of success of special interests in redistributive politics." Journal of Politics: 1132-55.

Downs, A. 1957. "An economic theory of democracy." New York: Harper.

Englebert, P. 2002. State legitimacy and development in Africa: Lynne Rienner Pub.

Ferejohn, J. A., and M. P. Fiorina. 1974. "The paradox of not voting: A decision theoretic analysis." The American Political Science Review: 525-36.

Gerber, A. S., D. P. Green, and C. W. Larimer. 2008. "Social pressure and voter turnout: Evidence from a large-scale field experiment." American Political Science Review 102 (01): 33-48.

Githongo, John. 2007. "Kenya's Fight Against Corruption: An Uneven Path to Political Accountability." Cato Institute Development Briefing Paper (2).

Grossman, G. M., and E. Helpman. 1996. "Electoral competition and special interest politics." The Review of Economic Studies: 265-86.

Ho, D. E., K. Imai, G. King, and E. A. Stuart. 2006. "Matching as nonparametric preprocessing for reducing model dependence in parametric causal inference." Political Analysis.

Imai, Kosuke, Gary King, and Oliva Lau. Zelig: Everyone's Statistical Software 2007 [cited. Available from http://gking.harvard.edu/zelig

Jackman, R. W. 1987. "Political institutions and voter turnout in the industrial democracies." The American Political Science Review: 405-23.

Keefer, P., and R. Vlaicu. 2008. "Democracy, Credibility, and Clientelism." Journal of Law, Economics, and Organization 24 (2): 371.

Kostadinova, T., and T. J. Power. 2007. "Does Democratization Depress Participation? Voter Turnout in the Latin American and Eastern European Transitional Democracies." Political Research Quarterly 60 (3): 363.

Kuenzi, M., and G. Lambright. 2005. "Who votes in Africa? An examination of electoral turnout in 10 African countries." Afrobarometer Working Paper.

Kuenzi, M., and G. Lambright. 2007. "Voter Turnout in Africa's Multiparty Regimes." Comparative Political Studies 40 (6): 665.

Laakso, L. 2007. "Insights into electoral violence in Africa." Votes, Money and Violence: Political Parties and Elections in Sub-Saharan Africa: 224.

Lacey, M. 2002. "Panel Tries Hard to Keep Kenya Vote Aboveboard." New York Times. December 23, 2002.

Lehoucq, F., "When Does a Market for Votes Emerge?", in Schaffer, F. C. 2007. Elections for sale: the causes and consequences of vote buying. London: Lynne Rienner.

Lindberg, S. I., and M. K. C. Morrison. 2008. "Are African Voters Really Ethnic or Clientelistic? Survey Evidence from Ghana." Political Science Quarterly 123 (1): 95-122.

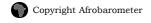
McCabe, Kevin A., Mary L. Rigdon, and Vernon L. Smith. 2003. "Positive Reciprocity and intentions in trust games." Journal of Economic Behavior and Organization 52: 267-75.

Morgan, S. L., and C. Winship. 2007. Counterfactuals and causal inference: Methods and principles for social research: Cambridge Univ Pr.

Ndegwa, Stephen. 2003. "Kenya: Third Time Lucky?" Journal of Democracy 14 (3): 145-58.

Nichter, S. 2008. "Vote-buying or turnout buying? Machine politics and the secret ballot." American Political Science Review 102 (01): 19-31.

O'Leary, C. 1962. The elimination of corrupt practices in British elections, 1868-1911: Clarendon Press.



Palfrey, T. R., and H. Rosenthal. 1983. "A strategic calculus of voting." Public Choice 41 (1): 7-53.

Palfrey, T. R., and H. Rosenthal. 1985. "Voter participation and strategic uncertainty." The American Political Science Review: 62-78.

Pearl, J. 2000. Causality: Models, reasoning, and inference: Cambridge Univ Pr.

Powell Jr, G. B. 1980. "Voting turnout in thirty democracies: Partisan, legal, and socio-economic influences." Electoral Participation: A Comparative Analysis: 534.

Riker, W. H., and P. C. Ordeshook. 1968. "A Theory of the Calculus of Voting." The American Political Science Review: 25-42.

Robinson, J. A., and T. Verdier. 2002. "The political economy of clientelism." CEPR Discussion Paper No. 3205.

Rosenbaum, P. R., and D. B. Rubin. 1985. "Constructing a control group using multivariate matched sampling methods that incorporate the propensity score." American Statistician: 33-8.

Schaffer, F. C. 2007. Elections for sale: the causes and consequences of vote buying. London: Lynne Rienner.

Shi, T. 1999. "Voting and nonvoting in China: voting behavior in plebiscitary and limited-choice elections." Journal of Politics: 1115-39.

Stokes, S. C. 2005. "Perverse accountability: A formal model of machine politics with evidence from Argentina." American Political Science Review 99 (03): 315-25.

Tullock, G. 1967. Toward a mathematics of politics: University of Michigan Press.

Van de Walle, N. 2003. "Meet the New Boss, Same as the Old Boss? The Evolution of Political Clientelism in Africa." Center for Global Development.

Vicente, P. C. 2008. "Is vote buying effective? Evidence from a field experiment in West Africa." Unpublished Manuscript.

Wantchekon, L. 2003. "Clientelism and voting behavior: Evidence from a field experiment in Benin." World Politics: 399-422.

Yakobson, A. 1995. "Secret Ballot and its Effects in the Late Roman Republic." Hermes: 426-42.

Young, D. J. 2009. "Is Clientelism at Work in African Elections? A Study of Voting Behavior in Kenya and Zambia." Afrobarometer Working Paper.

Zhong, Y., and J. Chen. 2002. "To vote or not to vote: An analysis of peasants' participation in Chinese village elections." Comparative Political Studies 35 (6): 686.

Publications List

AFROBAROMETER WORKING PAPERS

- No. 113 McCauley, John F., E. Gyimah-Boadi. "Religious Faith and Democracy: Evidence from the Afrobarometer Surveys" 2009.
- No. 112 Robinson, Amanda Lea. "National versus Ethnic Identity in Africa: State, Group, and Individual Level Correlates of National Identification" 2009.
- No.111 Kirwin, Mathew and Wonbin Cho. "Weak States and Political Violence in sub-Saharan Africa." 2009.
- No.110 Cho, Wonbin and Carolyn Logan. "Looking Toward the Future: Alternations in Power and Popular Perspectives on Democratic Durability in Africa." 2009.
- No.109 Mattes, Robert and Dangalira Mughogho . "The Limited Impacts of Formal Education on Democratic Citizenship in Africa." 2009.
- No.108 Logan, Carolyn and Eric Little. "The Quality of Democracy and Governance in Africa: New Results from Afrobarometer Round 4." 2009.
- No.107 Dunning, Thad and Lauren Harrison. "Cross-Cutting Cleavages and Ethnic Voting: An Experimental Study of Cousinage in Mali." 2009.
- No.106 Young, Daniel J. "Clientelism at Work in African Elections? A Study of Voting Behavior in Kenya and Zambia." 2009.
- No.105 Bratton, Michael and Peter Lolojih. "Rationality, Cosmopolitanism, and Adjustment Fatigue: Public Attitudes to Economic Reform in Zambia." 2009.
- No.104 Bratton, Michael. "Do Free Elections Foster Capable Governments? The Democracy-Governance Connection in Africa." 2008.
- 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.

Copyright Afrobarometer

