# Online Appendix

# Chapter 3 Supplemental Information

## A. Additional measures used in tests of alternative explanations and robustness test:

*Campaign exposure:*

- *Contacted in home:* "Has a candidate or agent of any political party come to your home since the campaigns began?" If yes, "Which party or parties have come to your home?"
- *Received SMS:* "Have you received text messages encouraging you to vote for any particular party?" If yes, "For which party or parties did the messages encourage you to vote?"
- *Offered money:* "Since the beginning of the campaigns, how many times has a candidate or someone from a political party offered you or someone in this household money or a gift in return for you vote?" If >0, "Which party or parties have offered money or gifts?" [Up to three mentions].
- *Attended rally:* "Have you attended any campaign rallies since the campaigns began?" If yes, "Which parties' rallies have you attended?

*Fear of social reprisal / fear of violence:* The survey first asked, "Thinking about the upcoming presidential election, which candidate do you think most people in this area support?" To probe perceptions about social reprisal, it then asked, "Now imagine that you voted against [INSERT NAME]. How afraid would you be that others would exclude you from social gatherings like wedding and funerals because of your vote?" To probe fear of violent retribution, it asked, "If others in the area knew that you voted against [INSERT NAME], how afraid would you be that others would attack or harm you because of your vote?"

*Beliefs about Mudavadi's ethnic intentions:* Constructed from questions on both surveys that asked, "How well do you think each of the following candidates would represent the interests of your ethnic group if elected: very well, somewhat well, not well, or not at all?"

*Overall evaluation of Mudavadi:* Constructed from questions on both surveys that asked, "For each of the following politicians, please tell me whether you like the candidate very much, like him somewhat, neither like him nor dislike him, dislike him somewhat, or dislike him very much."

## B. Additional Descriptive Statistics

Table SI.3.1. Descriptive Statistics

| | Mean | SD | Min | Max |
|---|---|---|---|---|
| Preferences changed during campaign | .195 | .40 | 1 | 1 |
| Coethnic in the race (Kikuyu / Luo) | .32 | .47 | 0 | 1 |
| Mixed parentage | .08 | .27 | 0 | 1 |
| Spouse from different ethnic group | .07 | .26 | 0 | 1 |
| Non-coethnics in network [0 to 4] | .13 | .46 | 0 | 4 |
| Non-coethnics in EA sample [share] | .29 | .32 | 0 | .95 |
| Political interest [4-point scale] | 2.62 | 1.07 | 1 | 4 |
| Education [8-point scale] | 4.2 | 1.9 | 1 | 8 |
| Radio news consumption [# days per week] | 5.8 | 2.3 | 0 | 7 |
| Newspaper consumption [# days per week] | 1.5 | 2.4 | 0 | 7 |
| TV news consumption [# days per week] | 3.4 | 3.2 | 0 | 7 |
| Vernacular radio source [yes] | .31 | .46 | 0 | 1 |
| Wealth index | .05 | 1.56 | -1.54 | 6.05 |
| Age | 34.4 | 13.2 | 18 | 87 |
| Female | .49 | .50 | 0 | 1 |
| Days between interviews | 66 | 7.7 | 40 | 86 |

*Notes:* Data is weighted to adjust for attrition between survey rounds.

## C. Logit results for preference change

Table SI.3.2. Logit Models of Preference Change – 2013 Election

| | (1) | (2) | (3) |
|---|---|---|---|
| Coethnic in the race (Kikuyu and Luo) | −0.94** | −1.06** | |
| | (0.00) | (0.00) | |
| Kikuyu | | | −0.56*** |
| | | | (0.09) |
| Luo | | | −1.71** |
| | | | (0.00) |
| Mixed parentage | −0.07 | 0.06 | −0.08 |
| | (0.85) | (0.90) | (0.84) |
| Spouse from different ethnic group | 0.06 | 0.27 | 0.10 |
| | (0.87) | (0.54) | (0.80) |
| Non-coethnics in network | −0.25 | −0.08 | −0.23 |
| | (0.36) | (0.78) | (0.38) |
| Non-coethnics in EA sample | 0.38 | 0.69*** | 0.38 |
| | (0.29) | (0.10) | (0.29) |
| Political interest | −0.37** | −0.25* | −0.37** |
| | (0.00) | (0.05) | (0.00) |
| Education | −0.11*** | −0.02 | −0.10 |
| | (0.09) | (0.76) | (0.11) |
| Radio news consumption | 0.09*** | 0.14* | 0.09*** |
| | (0.05) | (0.03) | (0.05) |
| Newspaper consumption | −0.01 | −0.10 | −0.01 |
| | (0.93) | (0.14) | (0.93) |
| TV news consumption | −0.01 | 0.07 | −0.02 |
| | (0.88) | (0.18) | (0.58) |
| Vernacular radio source | −0.67** | −0.36 | −0.69** |
| | (0.01) | (0.28) | (0.01) |
| Constant | −0.07 | −1.21 | 0.09 |
| | (0.95) | (0.40) | (0.93) |
| Observations | 729 | 654 | 729 |
| Pseudo R-squared | 0.08 | 0.08 | 0.09 |

*Notes:* the dependent variable in all models takes a value of 1 for respondents whose preferences changed between survey rounds. Model 1 serves as the base model. Model 2 excludes those who changed to or from "don't know." Model 3 disaggregates the main independent variable. All models include controls for wealth, age, gender, and the number of days between survey rounds. Data is weighed to account for attrition (see Supplemental information). p-values in parentheses; ***p<0.01, **p<0.05, *p< 0.1

Table SI.3.3. Logit Models of Preference Change – 2017 Election

| | (1) | (2) | (3) |
|---|---|---|---|
| Coethnic in the race (Kikuyu and Luo) | -1.46** | -1.87** | |
| | (0.00) | (0.00) | |
| Kikuyu | | | -1.47** |
| | | | (0.00) |
| Luo | | | -1.45** |
| | | | (0.00) |
| Mixed parentage | 0.69+ | 0.90* | 0.69+ |
| | (0.09) | (0.05) | (0.09) |
| Spouse from different ethnic group | 0.13 | -0.31 | 0.13 |
| | (0.72) | (0.54) | (0.72) |
| Political interest | -0.08 | -0.02 | -0.08 |
| | (0.54) | (0.93) | (0.54) |
| Non-coethnics in EA sample | -0.54 | -0.73 | -0.54 |
| | (0.21) | (0.18) | (0.21) |
| Education | -0.08 | -0.11 | -0.07 |
| | (0.38) | (0.30) | (0.38) |
| Newspaper consumption | 0.02 | 0.08 | 0.02 |
| | (0.81) | (0.46) | (0.81) |
| TV news consumption | -0.05 | -0.05 | -0.05 |
| | (0.32) | (0.41) | (0.32) |
| Radio news consumption | 0.02 | -0.00 | 0.02 |
| | (0.76) | (1.00) | (0.76) |
| Household income | -0.25+ | -0.20 | -0.25+ |
| | (0.07) | (0.21) | (0.06) |
| Constant | -0.14 | -0.10 | -0.14 |
| | (0.87) | (0.92) | (0.87) |
| Observations | 638 | 592 | 638 |
| Pseudo R-squared | 0.101 | 0.112 | 0.101 |

*Notes:* the dependent variable in all models takes a value of 1 for respondents whose preferences changed between survey rounds. Model 1 serves as the base model. Model 2 excludes those who changed to or from "don't know." Model 3 disaggregates the main independent variable. All models include controls for household income, age, and gender. Data is weighed to account for attrition (see Supplemental information). p-values in parentheses; ***p<0.01, **p<0.05, *p< 0.1

# D. Alternative Explanations

## D1. Party Switching

Table SI.3.4. List of Party Switchers

| Date | Name | Ethnic group | Prominence | Former party | New party |
|---|---|---|---|---|---|
| 11/21/2012 | Beatrice Kones | Kalenjin | Minor | ODM | URP |
| 11/21/2012 | Alex Mbui Muiru | Meru | Minor | PNU | URP |
| 11/31/2012 | James Nyoro | Kikuyu | Minor | TNA | GNU |
| 12/1/2012 | Wilfred Machage | Kuria | Major | DP | ODM |
| 12/2/2012 | James Rotich | Kalenjin | Minor | ODM | URP |
| 12/2/2012 | Kiptum Binott | Kalenjin | Minor | ODM | URP |
| 12/4/2012 | Gitobu Imanyara | Meru | Major | CCU | ODM |
| 12/5/2012 | Alexander Ngeno | Kalenjin | Minor | URP | Kanu |
| 12/5/2012 | Emmanuel Imana | Turkana | Minor | ODM | Kanu |
| 12/6/2012 | Bishop Godfrey Shiundu | Luhya | Minor | New Ford-K | ODM |
| 12/6/2012 | Bishop Robert Makona | Luhya | Minor | New Ford-K | ODM |
| 12/6/2012 | Bishop Maurice Maelo | Luhya | Minor | New Ford-K | ODM |
| 12/10/2012 | Charity Ngilu | Kamba | Major | Cord | Jubilee |
| 12/13/2012 | Daniel Karaba | Kikuyu | Minor | Narc-K | TNA |
| 12/15/2012 | Joseph Nyagah | Kikuyu | Major | ODM | TNA |
| 12/18/2012 | Zachary Ogongo | Kisii | Minor | Narc | ODM |
| 12/18/2012 | Robert Masese | Kisii | Minor | Narc | ODM |
| 12/18/2012 | Jackson Mjagi | Meru | Minor | PNU | ODM |
| 12/22/2012 | Aden Sugow | Somali | Minor | TNA | ODM |
| 12/26/2012 | Chachu Ganya | Gabra | Minor | N/A | URP |
| 12/26/2012 | Jeremiah Kioni | Kikuyu | Minor | N/A | UDF |
| 12/26/2012 | Soita Shitanda | Luhya | Major | N/A | UDF |
| 12/26/2012 | George Khaniri | Luhya | Minor | N/A | UDF |
| 12/26/2012 | Yusuf Chanzu | Luhya | Minor | N/A | UDF |
| 12/26/2012 | Justus Kizito | Luhya | Minor | N/A | UDF |
| 12/26/2012 | Samuel Poghisio | Maasai | Major | N/A | URP |
| 12/26/2012 | Gideon Konchellah | Maasai | Major | N/A | URP |
| 12/26/2012 | Chirau Mwakwere | Mijikenda | Major | N/A | URP |
| 12/26/2012 | Aden Duale | Somali | Major | N/A | URP |
| 12/26/2012 | Kanzungu Kambi | Taita | Major | N/A | URP |
| 12/26/2012 | Ekwe Ethuro (MP) | Turkana | Major | N/A | URP |
| 12/30/2012 | David Koros | Kalenjin | Minor | ODM | URP |
| 12/30/2012 | Cyrus Jirongo | Luhya | Major | Pambazuka alliance | Cord |
| 1/1/2013 | Njagi Kumantha | Embu | Minor | Democratic Party | TNA |

| | | | | | |
|---|---|---|---|---|---|
| 1/1/2013 | Martin Nyaga Wambora | Embu | Minor | APK | TNA |
| 1/1/2013 | Sylvester Gakumu | Embu | Minor | TNA | Narc-Kenya |
| 1/8/2013 | Peter ole Mositet | Maasai | Minor | ODM | TNA |
| 1/9/2013 | Catherine Wanjiku Irungu | Luhya | Minor | TNA | Mazingira Green Party |
| 1/15/2013 | Nderitu Mureithi | Kikuyu | Minor | PNU | UDF |
| 1/15/2013 | George Nyamweya | Kisii | Minor | PNU | UDF |
| 1/15/2013 | Stanley Livondo | Luhya | Minor | PNU | UDF |
| 1/17/2013 | Simon Lilan | Kalenjin | Minor | ODM | Wiper |
| 1/17/2013 | Laban Matelong | Kalenjin | Minor | ODM | Wiper |
| 1/17/2013 | Hassan Omar Sarai | Somali | Minor | ODM | Wiper |
| 1/18/2013 | Geoffrey Muturi | Embu | Minor | TNA | APK |
| 1/19/2013 | John Mututho | Kikuyu | Major | TNA | Narc |
| 1/20/2013 | Peter Ondieki | Kisii | Minor | ODM | PDM |
| 1/20/2013 | Mwakwazi Mtongolo | Taita | Minor | ODM | Wiper |
| 1/21/2013 | Hellen Sambili | Kalenjin | Minor | URP | Kanu |
| 1/22/2013 | Callen Orwaru | Kisii | Minor | TNA | The Independent Party |
| 1/22/2013 | Alfrida Gisairo | Kisii | Minor | ODM | Federal Party of Kenya |
| 1/22/2013 | Mary Orwenyo | Kisii | Minor | ODM | Progressive Party of Kenya |
| 1/23/2013 | Moses Changwony | Kalenjin | Minor | URP | Kanu |
| 1/23/2013 | Mark Chesegon | Kalenjin | Minor | URP | Kanu |
| 1/23/2013 | Irene Masit | Kalenjin | Minor | URP | Kanu |
| 1/23/2013 | Tabitha Seii | Kalenjin | Major | ODM | Wiper |
| 1/24/2013 | Mutua Katuku | Kamba | Minor | Wiper | CCU |
| 1/26/2013 | Adipo Akuome | Luo | Minor | ODM | Wiper |
| 1/26/2013 | Polynce Ochieng | Luo | Minor | ODM | Wiper |
| 1/27/2013 | Manyala Keya | Luhya | Minor | UDF | New Ford-K |
| 1/27/2013 | Soita Shitanda | Luhya | Major | UDF | New Ford-K |
| 1/27/2013 | George Munji | Luhya | Minor | UDF | Kanu |
| 1/27/2013 | John Shimaka | Luhya | Minor | UDF | Wiper |
| 1/27/2013 | Jared Okello | Luo | Minor | N/A | Ford-K |
| 1/27/2013 | Badi Twalib | Swahili | Minor | ODM | Wiper |
| 2/4/2013 | Zachary Obado | Luo | Minor | ODM | PDP |

Table SI.3.5. Party Switching by Ethnicity

| | Major | Minor | Total |
|---|---|---|---|
| Kikuyu | 2 | 4 | 6 |
| Luo | 0 | 4 | 4 |
| Kalenjin | 1 | 11 | 12 |
| Kamba | 1 | 1 | 2 |
| Luhya | 3 | 11 | 14 |
| Kisii | 0 | 7 | 7 |
| Meru/Embu | 1 | 6 | 7 |
| Mijikenda | 1 | 0 | 1 |
| Other | 6 | 7 | 13 |
| TOTAL | 15 | 51 | 66 |

Figure SI.3.2. Party Switchers and Preference Change

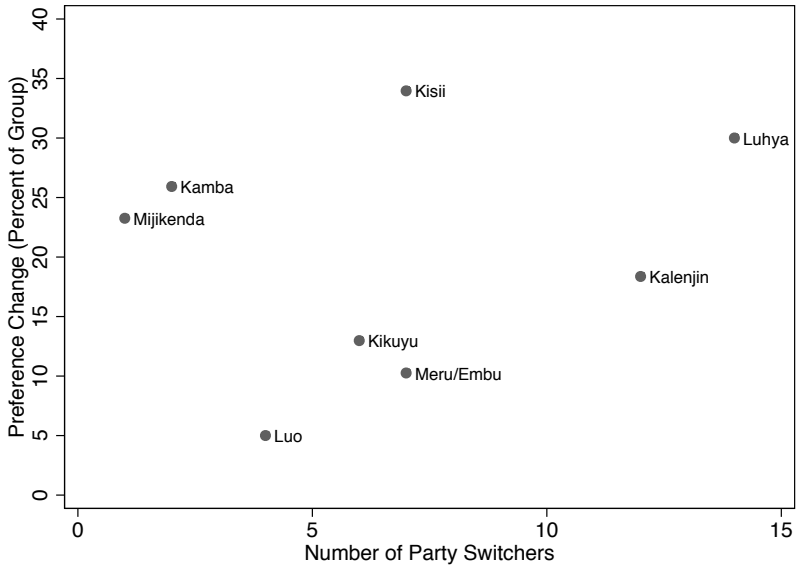


Table SI.3.6. Logit Models of Preference Change – Accounting for Mudavadi's Departure from Jubilee

| | (1) | (2) | (3) |
|---|---|---|---|
| Coethnic candidate in race | -0.89** | -0.94** | -0.90** |
| | (0.00) | (0.00) | (0.00) |
| Overall evaluation of Mudavadi | | 0.03 | |
| | | (0.79) | |
| Beliefs about Mudavadi's ethnic intentions | | | 0.14 |
| | | | (0.24) |
| Luhya respondents excluded | Yes | No | No |
| Controls from Table 2 | Yes | Yes | Yes |
| Observations | 583 | 660 | 696 |
| Pseudo R-squared | 0.08 | 0.08 | 0.08 |

*Notes:* Data is weighed to account for attrition. p-value in parentheses; ** p<0.01, * p<0.05, + p<0.1

## D2. Campaign Exposure

Table SI.3.7. Campaign Exposure (percentages)

| | (1) Groups *with* a coethnic in the race | (2) Groups *without* a coethnic in the race | Difference (1-2) |
|---|---|---|---|
| Contacted by Cord | 7.7 | 4.7 | 2.9 |
| Contacted by Jubilee | 3.5 | 3.1 | 0.4 |
| Received Cord SMS | 4.4 | 0.5 | 3.9** |
| Received Jubilee SMS | 3.4 | 0.9 | 2.4* |
| Offered money by Cord | 7.8 | 5.0 | 2.8 |
| Offered money by Jubilee | 3.4 | 2.7 | 0.7 |
| Attended Cord rally | 24.9 | 23.1 | 1.8 |
| Attended Jubilee rally | 16.4 | 20.4 | -4.0 |

*Notes:* Data is weighed to account for attrition. *p<.05; **p<.01

### D3. Social Sanction

Table SI.3.8. Perceived Threat of Social Sanction

| | (1) Groups *with* a coethnic in the race | (2) Groups *without* a coethnic in the race | Difference (1-2) |
|---|---|---|---|
| Fear of social reprisal (four-point scale) | 1.91 | 1.76 | 0.15 |
| Fear of violence (four-point scale) | 1.79 | 1.72 | 0.07 |

*Notes:* Data is weighed to account for attrition. *p<.05; **p<.01

## E. Robustness tests

### E1. Alternative Coding of Core Groups

As noted in the text, I treat two groups – the Kikuyu and Luo – as the core communities that had a coethnic leader in the 2013 race. Yet, one might think that having a vice-presidential nominee in the race would also provide a strong signal about which political alliance will best represent one's ethnic group. It might therefore be appropriate to treat the Kalenjin and Kamba as core groups, given the presence of William Ruto (a Kalenjin) and Kalonzo Musyoka (a Kamba) as the vice presidential nominees on the Jubilee and CORD tickets. To test this, I generate an alternative specification of the key independent variable – coethnic candidaste in the race – that takes a value of 1 for Kikuyus, Luos, Kalenjins, and Kambas. I re-estimate the main results on preference change using this alternative measure, again including all control variables employed in the main specification. The results in Table SI.3.7 show that the main findings are robust to treating the Kalenjin and Kamba as core groups.

Table SI.3.8. Logit Model of Preference Change – Alternative Specification of Core Groups

| | |
|---|---|
| Coethnic candidate in race – alternative specification | -0.45* |
| | (0.04) |
| Controls from Table 2 | Yes |
| Observations | 728 |
| Pseudo R-squared | 0.07 |

*Notes:* Data is weighed to account for attrition. p-value in parentheses; ** p<0.01, * p<0.05, + p<0.1

## F. Attrition

The data would be biased in favor of confirming the prediction that those without a coethnic in the race will be more likely to change their preferences during the campaign period

if: 1) among core groups, those more likely to change their preferences were more likely to drop out of the panel; 2) among swing groups, those more likely to change their preferences were less likely to drop out; or both. The data suggest, however, that attrition biased the sample in the opposite direction.

The best predictor of preference change (other than having a coethnic in the race) identified in the analysis of preference change is political interest. However, among those with a coethnic in the race, attrition was substantially higher for the more politically interested while being nearly identical among those without a coethnic in the race. Among those with a coethnic in the race, the attrition rate was 40.8% for those more interested in politics and 26.8% for those less interested. For those without a coethnic in the race, the attrition rates were 32.4% and 33.1% among those with more and less political interest.

Second, the results showed that respondents who primarily obtained news from vernacular radio stations were less likely to update their preferences. However, vernacular listeners were slightly more likely to drop out among those with a coethnic in the race, and slightly less likely to drop out among those without a coethnic, biasing against the main hypothesis. Among those with a coethnic in the race, the attrition rate among vernacular listeners was 35.9% compared to 33.5% for others. Among those without a coethnic in the race, the dropout rate for vernacular listeners was 31.0% compared to 33.3% for others.

Finally, as noted, all analysis is weighted to adjust for attrition on observables following Fitzgerald, Gottschalk, and Moffitt (1998). I estimated inverse propensity weights (IPW) using a three-step procedure. The first step was to identify factors that predict attrition. Feedback from the local survey company that conducted the interviews suggested that a primary source of attrition was variability in the quality of the seven teams (one per province) that conducted the second-round interviews. I therefore included province dummies. I also explored three other types of variable. First, I explored the individual-level covariates used in the models of preference change (measured in the first round): ethnicity dummies; whether respondents had a different spouse or partner; the diversity of social networks; the diversity of enumeration areas; political interest; education; the frequency of obtaining news from radio, newspapers, and TV; age; and gender. Second, I included measures of initial electoral preferences with dummy variables for Kenyatta supporters, Odinga supporters, those who were undecided between the two major candidates in the first round, and whether respondents reported feeling close to any party. Third, I included first-round variables that indicated a respondent might be disinclined to participate in a follow-up survey and/or might be difficult to reach. These included whether the respondent had a phone, the distance of his/her dwelling from the nearest major road, whether he/she was married, whether he/she was unemployed, and dummies for whether the interviewer rated the respondent as hostile, bored, or impatient during the first interview. I used bivariate logit models to test whether each of these 42 factors was significantly related to attrition, and retained all variables with a p-value less than .2. Second, I estimated a logit model of attrition that included the 22 variables identified in the first step and generated predicted attrition probabilities for all respondents. Finally, I created inverse propensity weights by taking the inverse of 1 minus the predicted probability of attrition.

## G. Interviewer Effects

Could the observed patterns of preference change be driven by interviewer effects? This would be a particular concern if many respondents were interviewed by a coethnic in one round and a non-coethnic in the other round. Another concern is that probability of being interviewed by a non-coethnic in one or both rounds could be higher for members of "swing" groups, accounting for the increase in preference change relative to "core" groups.

Table SI.3.8 provides details on interviewer-respondent coethnic matching. The table shows that in both rounds, the share of respondents interviewed by non-coethnic enumerator was similar across groups that did and did not have a coethnic in the race. I also re-estimate the main logit model of preference change from the main text including dummy variables for respondents who were interviewed by non-coethnics in round 1 and round 2. I also include an interaction term, which accounts for respondents who were interviewed by a non-coethnic in one round and a coethnic in the other (the inclusion of the interaction terms means that the coefficients for each of the dummy variables for round 1 and round 2 represent the effect of having been interviewed by a non-coethnic in that round and a coethnic in the other round). Caution should be exercised in interpreting the results because interviewer ethnicity was not randomly assigned, and the interviewer ethnicity variables could be confounded by other factors (for example, members of some groups were more likely to be interviewed by non-coethnics than members of others). Nonetheless, the results in Table SI.3.9 show that the main finding is robust to the inclusion of interviewer effects.

Table SI.3.10. Interviewer-Respondent Ethnicity Match (percentages)

| | (1) Groups *without* a coethnic in the race | (2) Groups *with* a coethnic in the race | Diff. (1-2) | p-value |
|---|---|---|---|---|
| Non-coethnic interviewer, round 1 | 59.0 | 55.7 | 3.3 | .39 |
| Non-coethnic interviewer, round 2 | 61.1 | 54.3 | 6.7 | .08 |
| Non-coethnic interviewer in both rounds | 52.6 | 48.9 | 3.7 | .35 |

*Notes:* Data is weighed to account for attrition.

Table SI.3.11. Logit Model of Preference Change

| | |
|---|---|
| Coethnic in the race | -0.98** |
| | (0.00) |
| Non-co-interviewer in round 1 (NCO_r1) | -0.41 |
| | (0.37) |
| Non-co-interviewer in round 2 (NCO_r2) | -1.62* |
| | (0.03) |
| NCO_r1 * NCO_r2 | 2.05* |
| | (0.02) |
| Controls from Table 2 | Yes |
| Observations | 728 |
| Pseudo R-squared | 0.09 |

*Notes:* Data is weighed to account for attrition. p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

## H. Initial Preferences (full results)

Table SI.3.12. Differences between President and VP Groups on Initial Preferences, 2013 and 2017 (percentages)

| A. JUBILEE | Kikuyu | Kalenjin | Difference |
|---|---|---|---|
| 2013 Election: | | | |
| Partisan | 82.6 | 66.2 | 16.4*** |
| Strong partisan | 74.7 | 61.4 | 13.3*** |
| Undecided | 2.9 | 7.9 | -5.1** |
| Perceive large gap in group representation | 34.6 | 36.6 | -1.9 |
| 2017 Election: | | | |
| Partisan | 93.9 | 92.4 | 1.4 |
| Strong partisan | 76.0 | 57.8 | 18.2*** |
| Undecided | 3.9 | 5.1 | -1.2 |
| Perceive large gap in group representation | 74.5 | 64.3 | 10.2*** |

| B. CORD/NASA | Luo | Kamba | Difference |
|---|---|---|---|
| 2013 Election: | | | |
| Partisan | 74.7 | 70.8 | 3.9 |
| Strong partisan | 68.2 | 62.7 | 5.5 |
| Undecided | 2.7 | 5.5 | -2.7 |
| Perceive large gap in group representation | 78.7 | 30.8 | 47.9*** |
| 2017 Election: | | | |
| Partisan | 94.7 | 91.8 | 2.9 |
| Strong partisan | 64.8 | 54.8 | 10.0** |
| Undecided | 5.8 | 12.1 | -6.3** |
| Perceive large gap in group representation | 64.6 | 50.3 | 14.3*** |

*Notes:* Differences based on two-sided t-tests. ***p<0.01, **p<0.05, *p< 0.1

# Chapter 4 Supplemental Information

## A. Presidential Rally Data

I counted a campaign rally as any public event at which a candidate spoke to the public, regardless of the size of the audience. Church attendance and funerals were not included, unless the candidate addressed the crowd. Press conferences were not included, as these were geared toward the media, not a local audience.

It is important to address two possible concerns about bias in the campaign event data. One is that the newspapers might have covered rallies in urban areas more extensively than in hard-to-reach rural locations. Given that urban areas are more ethnically diverse, over-reporting of rallies held in urban centers could bias the data in favor of confirming the proposition that the leading candidates focus their campaign efforts outside their core ethnic strongholds. It seems unlikely, however, that this was the case. The newspapers relied on an extensive network of freelance writers who were stationed throughout the country and could be called upon to cover rallies in remote areas. For this reason, coverage of rallies in outlying areas is likely to have been on par with coverage of rallies in urban centers. Moreover, the data show that the papers had little trouble covering rallies outside Kenya's two major urban areas: only 16.5% (44 of 271) of mentioned rallies were held in the 12 constituencies that comprise Nairobi and Mombasa, Kenya's two largest cities.

A second concern is that the papers may have devoted more space to particular candidates. The data shows that the papers did report more rallies held by the incumbent president than the opposition challengers. Of the 271 coded rallies, the distribution across the candidates was as follows: Kibaki 49%, Odinga 29%, and Musyoka 25%. It is impossible to know whether this reflects bias on the part of the papers, or whether Kibaki actually held more rallies than the other candidates. What matters more than whether the papers covered the three candidates equally, however, is whether the papers exhibited any systematic bias in covering rallies in different types of areas. The argument outlined above is that the candidates focus their efforts on swing areas and avoid holding rallies in core areas. Thus, the critical concern regarding bias is whether the papers were more or less likely to cover rallies in core or swing areas. If the papers, for example, systematically under-reported rallies held in the parties' ethnic core areas, the tests would be biased in favor of confirming the hypothesis. I suggest, however, that the opposite was the case. When the parties held rallies in their strongholds or in opponents' strongholds, these rallies tended to be major events that were carefully watched by the media. By contrast, a rally in a swing area was more likely to be another in a long string of relatively similar events. Thus, to the extent that coverage may have been biased, the papers in all likelihood over-reported rallies in the parties' strongholds relative to the swing areas, biasing the data *against* confirming the argument outlined above.

## B. Constituency-level ethnicity estimates

To generate estimates of the ethnic composition of Kenya's 210 parliamentary constituencies, I merged data from 12 nationally-representative surveys conducted between November 2006 and January 2009, yielding a total sample of 39,065 respondents. The data came from surveys conducted by three local survey firms. Strategic Research provided data from four polls (November 2006, March 2007, September 2007, December 2007); Steadman (now Ipsos) provided data from six (October 2007, mid-November 2007, late November 2007, early December 2007, mid-December 2007, December 2008); and Research International (now TNS-RMS) provided data from one (December 2008-January 2009). A final data set came from the Afrobarometer (December 2007), which was conducted in Kenya by Steadman. All polls were nationally representative, and all included a question about ethnic identification that asked, "What is your ethnic community?" or a similar variant. The mean number of respondents per constituency was 186.

To validate these measures, I compare the survey estimates to the 1989 census data at the district level. At the time of the 1989 census there were 41 districts. Because parliamentary constituencies are nested within districts, it is possible to create district-level estimates from my survey data and then compare these to the 1989 census figures. Figure SI.4.1 plots the district-level estimate created from survey data against the 1989 census data for all groups that make up more than 1% of the population (based on the 1989 census) and a residual other category. Given that the survey data was collected nearly 20 years after the 1989 census, I do not expect a perfect match. The plots show, however, that the survey estimates match the census data surprisingly well.

As a second check, I plot the constituency-level estimates against the census data aggregated to the constituency level in 1989. However, because some constituency boundaries changed between 1989 and 2007, I am only able to include 157 out of 210 constituencies for this. Figure SI.4.2 plots the constituency-level estimated created from survey data against the 1989 census data for the three groups that had a coethnic candidate in the 2007 race and a residual other category. The relatively close fit between the survey estimates and the census data – aggregated both to the district and the constituency level – suggests that it is reasonable to use survey data to estimate sub-national ethnic demographics.

Figure SI.4.1. Comparison between Survey Estimates and Census Data at the District Level

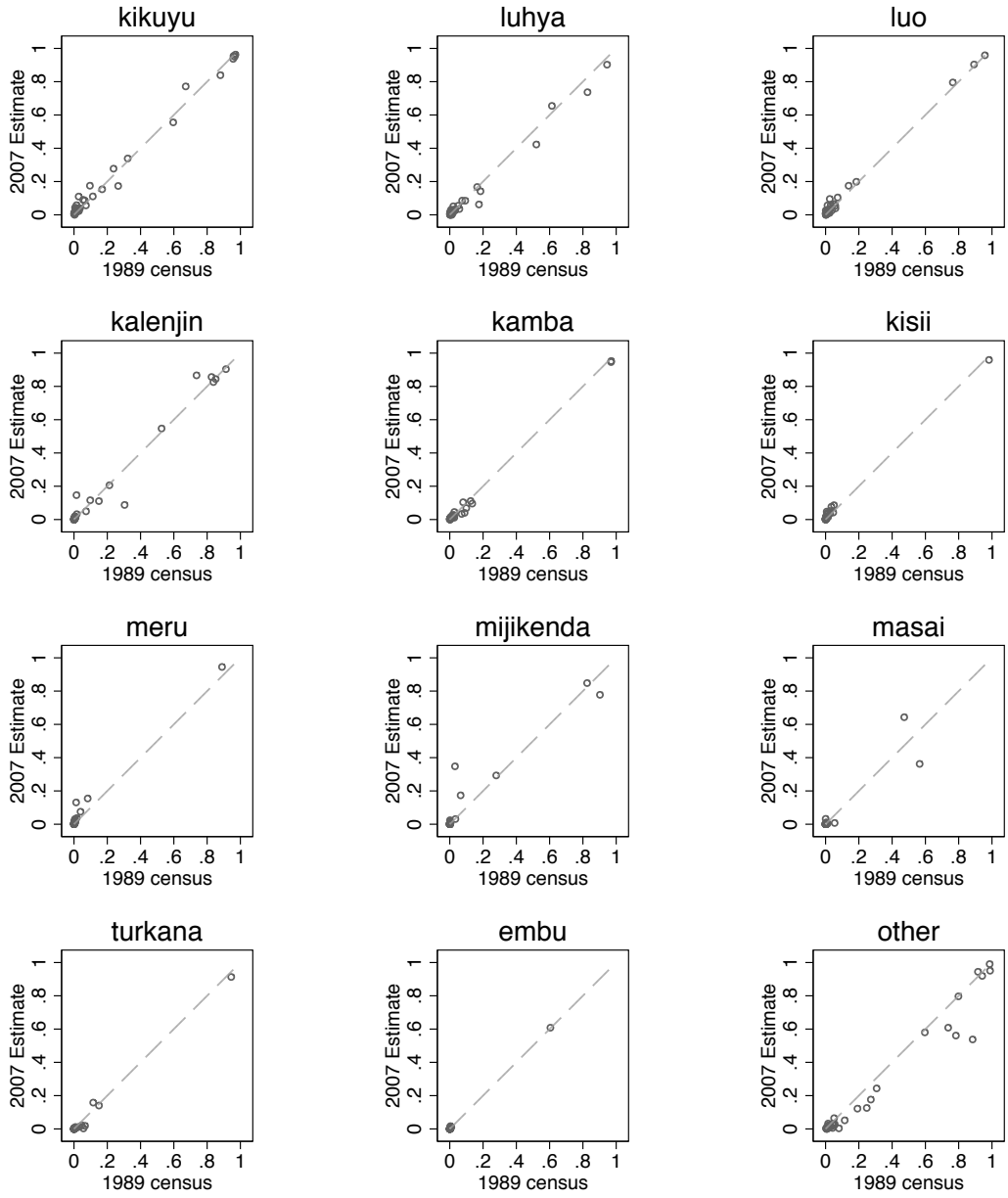
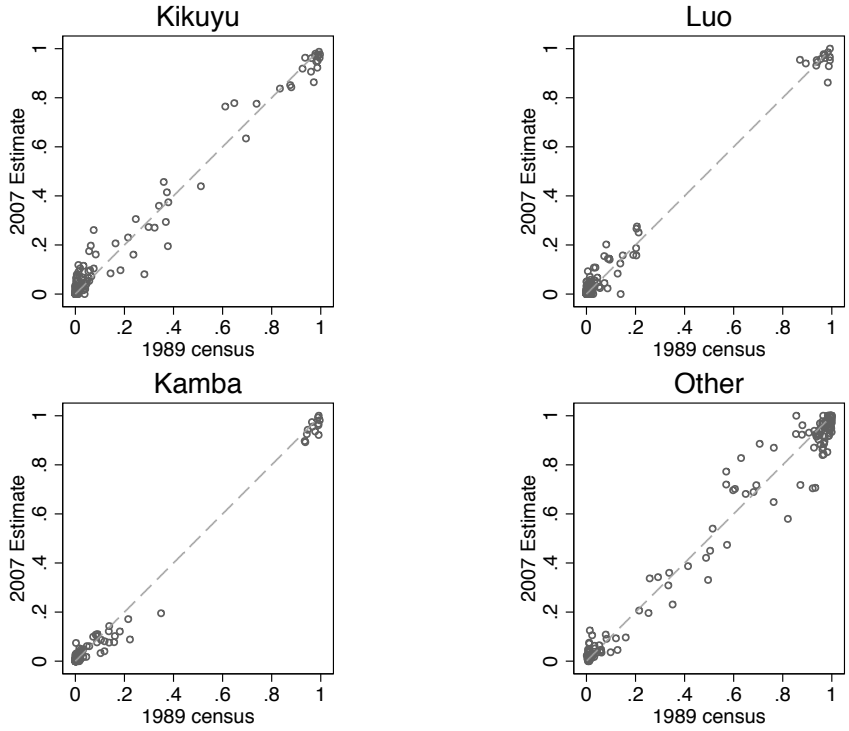


Figure SI.4.2. Comparison between Survey Estimates and Census Data at the Constituency Level



## C. Voting intentions by ethnic group at the start of campaigns in 2007, 2013, and 2017

Table SI.4.1 Voting Intentions at the Start of the 2007 Campaigns (percentages)

| | Kibaki | Odinga | Musyoka | Other | Undecided |
|---|---|---|---|---|---|
| Kikuyu | 90 | 6 | 1 | 1 | 3 |
| Luo | 4 | 94 | 0 | 0 | 2 |
| Kamba | 24 | 9 | 59 | 0 | 8 |
| Luhya | 22 | 68 | 3 | 3 | 4 |
| Kalenjin | 13 | 76 | 2 | 1 | 8 |
| Kisii | 26 | 68 | 0 | 4 | 2 |
| Meru | 89 | 6 | 1 | 0 | 5 |
| Mijikenda | 33 | 52 | 5 | 1 | 9 |
| Other (each < 5%) | 42 | 50 | 0 | 1 | 7 |

*Notes:* Data come from a survey conducted by the Steadman Group on September 8-20, 2007 (n=2,020). RTAs (1.3% of the sample) are excluded.

Table SI.4.2. Voting Intentions at the Start of the 2013 Campaigns (percentages)

| | Kenyatta | Odinga | Undecided |
|---|---|---|---|
| Kikuyu | 91 | 8 | 1 |
| Luo | 3 | 97 | 0 |
| Kamba | 19 | 79 | 2 |
| Luhya | 13 | 78 | 8 |
| Kalenjin | 88 | 11 | 1 |
| Kisii | 27 | 70 | 3 |
| Meru | 81 | 17 | 2 |
| Mijikenda | 11 | 85 | 4 |
| Other (each < 5%) | 48 | 50 | 2 |

*Notes:* Data come from the first round of the panel survey (n=1,246) described in the previous chapter, which conducted in December 2012. Respondents were asked whom they would vote for if the presidential election included only Uhuru Kenyatta and Raila Odinga. RTAs (0.7% of the sample) are excluded.

Table SI.4.3. Voting Intentions at the Start of the 2017 Campaigns (percentages)

| | Kenyatta | Odinga | Other | Undecided |
|---|---|---|---|---|
| Kikuyu | 92 | 4 | 1 | 4 |
| Luo | 6 | 88 | 0 | 6 |
| Kamba | 25 | 60 | 3 | 12 |
| Luhya | 24 | 65 | 1 | 11 |
| Kalenjin | 80 | 15 | 0 | 5 |
| Kisii | 25 | 64 | 0 | 11 |
| Meru | 84 | 11 | 0 | 5 |
| Mijikenda | 20 | 63 | 1 | 16 |
| Other (each < 5%) | 48 | 43 | 2 | 8 |

*Notes:* Data come from a survey conducted by Ipsos in May 2017 (n=2,026). RTAs (2.6% of the sample) are excluded.

## D. Alternative definitions of ethnic areas

To examine whether the leading candidates converged in their pursuit of potential swing groups, the analysis in Figure 4.6 uses 75% as a threshold to define ethnic areas. The figures below replicate the analysis again using two alternative thresholds, 50% and 90%. The use of these alternative thresholds does not alter the conclusion that the leading parties converged on the same set of ethnic swing communities.

Figure SI.4.3. Rallies Held in Major Ethnic Areas – 50% threshold

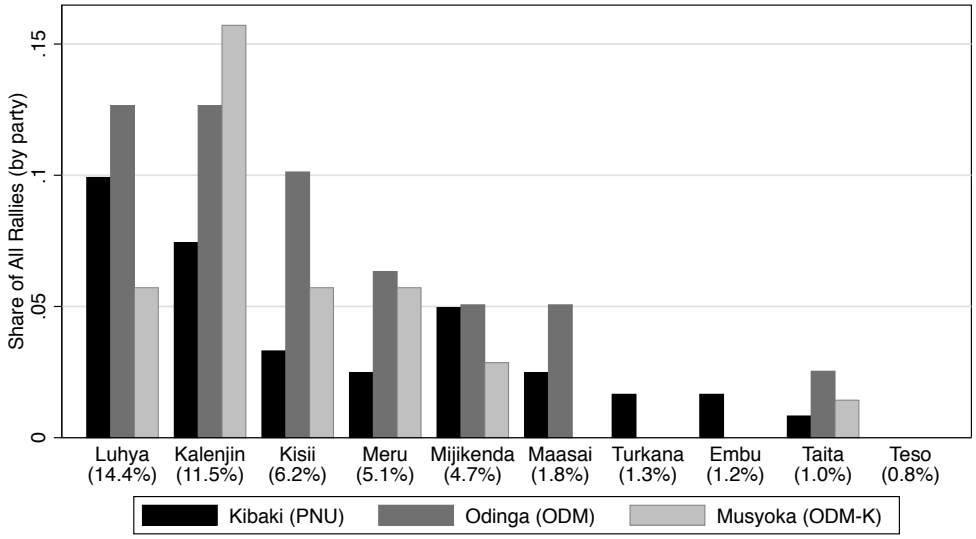
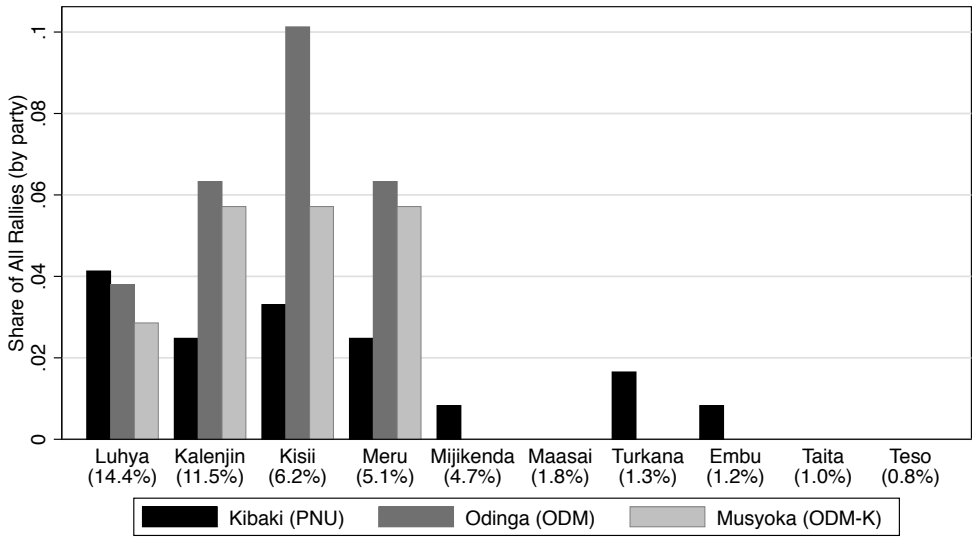



Figure SI.4.4. Rallies Held in Major Ethnic Areas – 90% threshold



## E. Robustness tests:

I present a series of robustness tests that show that the analysis of presidential rallies in Chapter 4 is robust to a variety of alternative specifications:

- Table SI.4.4 uses districts instead of constituencies as the unit of analysis. The main results are unchanged.

- Table SI.4.5 uses an alternative data source (the 2003 and 2008 Demographic and Health Surveys) to estimate the ethnic composition of parliamentary constituencies. The results are similar to those shown in the main text, though the coefficients for Kikuyu share in models 4 and 6 fall below conventional levels of statistical significance.

- Table SI.4.6 codes Kibaki's coethnic community as the Kikuyu, Meru, Embu bloc rather than only Kikuyus. The results are nearly identical to those presented in the main text. I do not re-estimate models 7 and 8, which are unchanged by this specification.

- Table SI.4.7 controls for accessibility. I include a dummy variable that measures whether constituencies can be accessed via Kenya's major roads. Unfortunately, data on road conditions is not available, so this variable is simply a dichotomous measure of whether the main highways or trunk lines run through each constituency. This variable is not significant in any of the models, and the main results from the main text are robust to the inclusion of this variable.

Table SI.4.4. Negative Binomial Regression Models of Presidential Rallies (districts as unit of analysis)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) | (7) Kibaki (PNU) | (8) Odinga (ODM) |
|---|---|---|---|---|---|---|---|---|
| Swing group share | 1.143** | 2.714** | 0.836 | | | | | |
| | (0.004) | (0.000) | (0.203) | | | | | |
| Kikuyu share | | | | -1.381* | -3.972** | -4.224** | | |
| | | | | (0.012) | (0.000) | (0.007) | | |
| Luo share | | | | -3.059** | -1.456* | -2.476+ | | |
| | | | | (0.008) | (0.020) | (0.065) | | |
| Kamba share | | | | -0.348 | -5.797+ | 0.862 | | |
| | | | | (0.458) | (0.072) | (0.105) | | |
| PNU ethnic coalition share | | | | | | | -0.524 | |
| | | | | | | | (0.148) | |
| ODM ethnic coaltion share | | | | | | | | 0.607 |
| | | | | | | | | (0.240) |
| Voters (10,000) | 0.007 | -0.009 | 0.039* | -0.004 | -0.013 | 0.009 | 0.012 | 0.009 |
| | (0.376) | (0.400) | (0.019) | (0.680) | (0.272) | (0.482) | (0.163) | (0.481) |
| Area (sq. km.) | 0.036** | 0.011 | 0.041* | 0.026* | 0.020 | 0.013 | 0.026* | 0.006 |
| | (0.001) | (0.373) | (0.032) | (0.027) | (0.137) | (0.376) | (0.013) | (0.719) |
| Population density | -4.958 | -2.283 | -8.945 | -3.794 | -2.784 | -4.820 | -3.218 | 0.053 |
| | (0.240) | (0.612) | (0.161) | (0.373) | (0.533) | (0.326) | (0.436) | (0.992) |
| Distance to Nairobi | -0.000** | -0.000* | -0.000 | -0.000* | -0.000** | -0.000 | -0.000+ | 0.000 |
| | (0.004) | (0.035) | (0.666) | (0.027) | (0.004) | (0.309) | (0.070) | (0.497) |
| Largest town population (10,000) | 0.055** | 0.033 | 0.006 | 0.057** | 0.048+ | 0.008 | 0.037** | -0.011 |
| | (0.000) | (0.128) | (0.858) | (0.000) | (0.055) | (0.780) | (0.009) | (0.663) |
| Number of major towns | 0.120 | 0.241** | -0.204 | 0.210* | 0.252* | -0.020 | 0.057 | 0.124 |
| | (0.116) | (0.010) | (0.163) | (0.011) | (0.012) | (0.859) | (0.480) | (0.287) |
| District contains Starehe constituency | -16.035** | -8.419 | -3.282 | -15.828** | -12.508+ | -1.372 | -10.642** | 4.092 |
| | (0.000) | (0.188) | (0.742) | (0.001) | (0.080) | (0.871) | (0.010) | (0.594) |
| Constant | -0.608 | -1.650** | -0.970 | 0.633 | 1.577** | 1.029 | 0.218 | -0.678 |
| | (0.161) | (0.006) | (0.183) | (0.210) | (0.005) | (0.110) | (0.660) | (0.288) |
| Observations | 41 | 41 | 41 | 41 | 41 | 41 | 41 | 41 |
| Pseudo R-squared | 0.232 | 0.217 | 0.109 | 0.287 | 0.271 | 0.304 | 0.194 | 0.0734 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table SI.4.5. Negative Binomial Regression Models of Presidential Rallies (alternative measure of ethnic demography)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) | (7) Kibaki (PNU) | (8) Odinga (ODM) |
|---|---|---|---|---|---|---|---|---|
| Swing group share | 0.576+ | 1.752** | 0.143 | | | | | |
| | (0.051) | (0.000) | (0.723) | | | | | |
| Kikuyu share | | | | -0.497 | -1.798** | -0.941 | | |
| | | | | (0.182) | (0.002) | (0.126) | | |
| Luo share | | | | -2.896** | -1.287* | -3.007* | | |
| | | | | (0.007) | (0.035) | (0.035) | | |
| Kamba share | | | | 0.456 | -3.207* | 1.545** | | |
| | | | | (0.241) | (0.045) | (0.000) | | |
| PNU ethnic coalition share | | | | | | | -0.543+ | |
| | | | | | | | (0.084) | |
| ODM ethnic coalition share | | | | | | | | -0.090 |
| | | | | | | | | (0.814) |
| Voters (10,000) | 0.081** | 0.086* | 0.048 | 0.092** | 0.088* | 0.049 | 0.087** | 0.098* |
| | (0.007) | (0.024) | (0.402) | (0.002) | (0.020) | (0.374) | (0.003) | (0.023) |
| Area (sq. km.) | 0.000 | -0.000 | 0.000 | 0.000 | -0.000 | -0.000 | 0.000+ | -0.000 |
| | (0.137) | (0.558) | (0.429) | (0.448) | (0.680) | (0.852) | (0.089) | (0.543) |
| Population density | -0.000 | -0.000 | -0.000 | -- | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.857) | (0.748) | (0.300) | | (0.819) | (0.415) | (0.759) | (0.741) |
| Distance to Nairobi | -0.001 | 0.000 | 0.000 | 0.000 | -0.000 | 0.002 | -0.001 | 0.002* |
| | (0.308) | (0.905) | (0.939) | (0.996) | (0.899) | (0.243) | (0.392) | (0.017) |
| Number of major towns | 0.479** | 0.478** | 0.257 | 0.515** | 0.473** | 0.429* | 0.477** | 0.393* |
| | (0.000) | (0.003) | (0.243) | (0.000) | (0.004) | (0.031) | (0.000) | (0.027) |
| Starehe constituency | 2.659* | 3.223* | 5.671 | 2.845** | 3.082+ | 5.423+ | 2.718* | 2.889+ |
| | (0.012) | (0.047) | (0.125) | (0.000) | (0.058) | (0.084) | (0.013) | (0.098) |
| Constant | -1.856** | -3.309** | -1.740** | -1.598** | -1.491** | -2.042** | -1.460** | -2.629** |
| | (0.000) | (0.000) | (0.002) | (0.000) | (0.003) | (0.001) | (0.000) | (0.000) |
| Observations | 198 | 198 | 198 | 198 | 198 | 198 | 198 | 198 |
| Pseudo R-squared | 0.156 | 0.142 | 0.0318 | 0.196 | 0.148 | 0.137 | 0.154 | 0.0838 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

*Notes:* Model 4 excludes population density becaue the model fails to converge with its inclusion.

Table SI.4.6. Negative Binomial Regression Models of Presidential Rallies (Kibaki's coethnic group coded as the Kikuyu, Meru, Embu bloc)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) |
|---|---|---|---|---|---|---|
| Swing group share | 0.619+ | 1.716** | 0.234 | | | |
| | (0.050) | (0.000) | (0.589) | | | |
| Kikuyu/Meru/Embu share | | | | -0.676+ | -1.767** | -1.128+ |
| | | | | (0.095) | (0.001) | (0.069) |
| Luo share | | | | -2.927** | -1.230* | -6.300 |
| | | | | (0.009) | (0.031) | (0.109) |
| Kamba share | | | | 0.449 | -3.093* | 1.423** |
| | | | | (0.239) | (0.021) | (0.001) |
| Voters (10,000) | 0.088** | 0.109** | 0.053 | 0.107** | 0.110** | 0.090 |
| | (0.004) | (0.005) | (0.357) | (0.001) | (0.005) | (0.132) |
| Area (sq. km.) | 0.000 | -0.000 | 0.000 | 0.000 | -0.000 | -0.000 |
| | (0.179) | (0.722) | (0.504) | (0.597) | (0.905) | (0.643) |
| Population density | -0.000 | -0.000 | -0.000 | 0.000 | -0.000 | -0.000 |
| | (0.901) | (0.771) | (0.311) | (0.531) | (0.747) | (0.907) |
| Distance to Nairobi | -0.001 | -0.000 | 0.000 | -0.000 | -0.001 | 0.002 |
| | (0.267) | (0.795) | (0.980) | (0.968) | (0.585) | (0.205) |
| Number of major towns | 0.488** | 0.403* | 0.294 | 0.520** | 0.400* | 0.359+ |
| | (0.000) | (0.011) | (0.181) | (0.000) | (0.011) | (0.055) |
| Starehe constituency | 2.456* | 2.624 | 5.544 | 2.076* | 2.650 | 3.446 |
| | (0.020) | (0.108) | (0.132) | (0.035) | (0.108) | (0.199) |
| Constant | -1.888** | -3.145** | -1.859** | -1.647** | -1.323* | -2.208** |
| | (0.000) | (0.000) | (0.001) | (0.000) | (0.013) | (0.000) |
| Observations | 210 | 210 | 210 | 210 | 210 | 210 |
| Pseudo R-squared | 0.156 | 0.135 | 0.0331 | 0.203 | 0.142 | 0.169 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table SI.4.7. Negative Binomial Regression Models of Presidential Rallies (including road variable)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) | (7) Kibaki (PNU) | (8) Odinga (ODM) |
|---|---|---|---|---|---|---|---|---|
| Swing group share | 0.624* | 2.082** | 0.262 | | | | | |
| | (0.046) | (0.000) | (0.536) | | | | | |
| Kikuyu share | | | | -0.846+ | -2.931** | -3.002** | | |
| | | | | (0.064) | (0.000) | (0.008) | | |
| Luo share | | | | -2.831** | -1.101* | -5.269+ | | |
| | | | | (0.007) | (0.048) | (0.089) | | |
| Kamba share | | | | 0.492 | -2.977* | 1.239** | | |
| | | | | (0.172) | (0.018) | (0.002) | | |
| PNU ethnic coalition share | | | | | | | -0.654+ | |
| | | | | | | | (0.065) | |
| ODM ethnic coalition share | | | | | | | | 0.073 |
| | | | | | | | | (0.842) |
| Connected to road network | -0.108 | 0.188 | 0.268 | -0.282 | 0.265 | 0.088 | 0.009 | 0.360 |
| | (0.737) | (0.650) | (0.561) | (0.386) | (0.523) | (0.834) | (0.979) | (0.397) |
| Voters (10,000) | 0.086** | 0.102* | 0.044 | 0.107** | 0.105** | 0.082 | 0.090** | 0.093* |
| | (0.005) | (0.011) | (0.445) | (0.001) | (0.009) | (0.156) | (0.003) | (0.028) |
| Area (sq. km.) | 0.000 | -0.000 | 0.000 | 0.000 | 0.000 | -0.000 | 0.000 | -0.000 |
| | (0.165) | (0.694) | (0.601) | (0.479) | (0.964) | (0.868) | (0.131) | (0.522) |
| Population density | 0.000 | 0.000 | -0.000 | 0.000 | 0.000 | 0.000 | -0.000 | -0.000 |
| | (0.990) | (0.930) | (0.318) | (0.432) | (0.945) | (0.953) | (0.895) | (0.738) |
| Distance to Nairobi | -0.001 | -0.000 | 0.000 | -0.000 | -0.001 | 0.001 | -0.001 | 0.002* |
| | (0.292) | (0.839) | (0.966) | (0.916) | (0.390) | (0.563) | (0.314) | (0.018) |
| Number of major towns | 0.517** | 0.470** | 0.293 | 0.571** | 0.495** | 0.441* | 0.497** | 0.364* |
| | (0.000) | (0.004) | (0.187) | (0.000) | (0.002) | (0.021) | (0.000) | (0.036) |
| Starehe constituency | 2.373* | 2.254 | 5.431 | 1.980* | 2.213 | 3.102 | 2.439* | 2.862+ |
| | (0.022) | (0.137) | (0.130) | (0.042) | (0.152) | (0.230) | (0.021) | (0.092) |
| Constant | -1.882** | -3.739** | -2.061** | -1.477** | -1.542* | -1.987** | -1.468** | -2.894** |
| | (0.000) | (0.000) | (0.001) | (0.002) | (0.010) | (0.003) | (0.001) | (0.000) |
| Observations | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| Pseudo R-squared | 0.157 | 0.153 | 0.0348 | 0.206 | 0.166 | 0.196 | 0.156 | 0.0832 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

*Notes:* Model 4 excludes Number of major towns becaue the model fails to converge with its inclusion.

# F. Alternative explanations

## F1. Institutions

Table SI.4.8 shows that at the start of the campaign the two leading candidates – Kibaki and Odinga – had already satisfied the "five-of-eight" rule which stipulated that to win the election in the first round a candidate needed at least 25% of the vote in five of Kenya's eight provinces.

Table SI.4.8. Voting Intentions by Province in September 2007 (percentages)

| | Kibaki | Odinga | Musyoka | Other/ Undecided |
|---|---|---|---|---|
| Nairobi | 38 | 52 | 5 | 4 |
| Central | 82 | 12 | 1 | 4 |
| Coast | 36 | 50 | 6 | 8 |
| Eastern | 51 | 7 | 35 | 7 |
| Nyanza | 8 | 90 | 0 | 2 |
| Rift Valley | 35 | 54 | 3 | 7 |
| Western | 26 | 67 | 4 | 3 |
| Northeastern | 27 | 70 | 3 | 0 |

*Notes:* Data come from a survey conducted by the Steadman Group on September 8-20, 2007 (n=2,020).

## F2. Ethnic diversity

Table SI.4.9 re-estimates the main models of presidential rallies and includes a measure of ethnic fractionalization, created from the survey data used to estimate the ethnic composition of parliamentary constituencies. The coefficient on this variable is positive and significant in several models, suggesting that parties do target more diverse areas. More importantly, the main findings from the main text related to the targeting of campaign effort across core and swing groups are largely unaffected by the inclusion of the ethnic fractionalization measure, demonstrating that the main findings presented in the main text cannot be attributed to parties focusing on ethnically-diverse areas.

Table SI.4.10 examines a variant of the argument that parties target areas where the vote is "split" at the start of the race. For this, I estimated voting intentions by constituency at the start of the campaign using data from a national survey conducted in early September, prior to the main period of campaigning. From this, I generated estimates of voting intentions by ethnic group. Then, to create constituency-level estimates of support for the candidates I multiplied the group-level data by the ethnic composition of each constituency. Finally, I created a dummy variable that takes on a value of 1 for any constituency in which no candidate had more than 50% of the vote share at the start of the race. This measure provides a reasonable way of distinguishing areas where the vote is "split" from those where one candidate is dominant. I then replicate the main analysis of presidential rallies from the main text. The results in Table SI.4.10 indicate that while the "split constituencies" variable is significant in several models, the main findings on ethnic composition are largely unaffected by the inclusion of this variable. I interpret these results to mean that "split" areas are one type of swing area. But what makes these areas attractive targets is that they are inhabited primarily by groups that do not have a coethnic leader in the race, not the fact that they are ethnically diverse. Moreover, the finding that the main

measures of ethnic composition are robust to the inclusion of this measure indicates that swing areas also include more homogenous constituencies that are inhabited by a single group that does not have a coethnic in the race.

Table SI.4.9. Negative Binomial Regression Models of Presidential Rallies (including ethnic fractionalization)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) | (7) Kibaki (PNU) | (8) Odinga (ODM) |
|---|---|---|---|---|---|---|---|---|
| Swing group share | 0.522 | 2.214** | 0.313 | | | | | |
| | (0.111) | (0.000) | (0.471) | | | | | |
| Kikuyu share | | | | -0.795+ | -3.407** | -3.593* | | |
| | | | | (0.096) | (0.000) | (0.010) | | |
| Luo share | | | | -3.327* | -1.097+ | -8.169 | | |
| | | | | (0.016) | (0.058) | (0.103) | | |
| Kamba share | | | | 0.729+ | -3.244* | 1.432** | | |
| | | | | (0.056) | (0.033) | (0.001) | | |
| PNU ethnic coalition share | | | | | | | -0.619+ | |
| | | | | | | | (0.092) | |
| ODM ethnic coalition share | | | | | | | | 0.026 |
| | | | | | | | | (0.945) |
| Ethnic fractionalization | 0.648 | 0.976* | -0.156 | 1.071* | 1.157* | 1.229+ | 0.739+ | 1.091* |
| | (0.117) | (0.049) | (0.805) | (0.011) | (0.026) | (0.067) | (0.069) | (0.028) |
| Voters (10,000) | 0.069* | 0.086* | 0.051 | 0.085** | 0.090* | 0.093 | 0.070* | 0.070+ |
| | (0.029) | (0.032) | (0.380) | (0.009) | (0.025) | (0.112) | (0.028) | (0.099) |
| Area (sq. km.) | 0.000 | -0.000 | 0.000 | 0.000 | -0.000 | -0.000 | 0.000 | -0.000 |
| | (0.354) | (0.479) | (0.477) | (0.979) | (0.748) | (0.642) | (0.295) | (0.402) |
| Population density | -0.000 | -0.000 | -0.000 | -- | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.678) | (0.716) | (0.363) | | (0.687) | (0.972) | (0.556) | (0.376) |
| Distance to Nairobi | -0.001 | -0.000 | -0.000 | 0.000 | -0.001 | 0.001 | -0.001 | 0.002* |
| | (0.354) | (0.769) | (0.960) | (0.998) | (0.305) | (0.488) | (0.308) | (0.035) |
| Number of major towns | 0.496** | 0.463** | 0.316 | 0.535** | 0.497** | 0.434* | 0.485** | 0.364* |
| | (0.000) | (0.004) | (0.158) | (0.000) | (0.002) | (0.020) | (0.000) | (0.031) |
| Starehe constituency | 2.664* | 2.716+ | 5.269 | 2.490** | 2.729 | 3.374 | 2.772* | 3.586* |
| | (0.014) | (0.095) | (0.148) | (0.000) | (0.104) | (0.210) | (0.013) | (0.048) |
| Constant | -1.969** | -3.806** | -1.867** | -1.850** | -1.434** | -2.256** | -1.508** | -2.640** |
| | (0.000) | (0.000) | (0.001) | (0.000) | (0.005) | (0.000) | (0.000) | (0.000) |
| Observations | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| Pseudo R-squared | 0.162 | 0.163 | 0.0339 | 0.218 | 0.179 | 0.207 | 0.163 | 0.0943 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

*Notes:* Model 4 excludes population density becaue the model fails to converge with its inclusion.

Table SI.4.10. Negative Binomial Regression Models of Presidential Rallies (including "split" constituencies)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) | (7) Kibaki (PNU) | (8) Odinga (ODM) |
|---|---|---|---|---|---|---|---|---|
| Swing group share | 0.535+ | 2.123** | 0.245 | | | | | |
| | (0.093) | (0.000) | (0.565) | | | | | |
| Kikuyu share | | | | -0.737 | -3.001** | -3.152** | | |
| | | | | (0.110) | (0.000) | (0.009) | | |
| Luo share | | | | -2.825** | -1.126* | -5.657 | | |
| | | | | (0.009) | (0.045) | (0.104) | | |
| Kamba share | | | | 0.578 | -3.305* | 1.293** | | |
| | | | | (0.113) | (0.029) | (0.001) | | |
| PNU ethnic coalition share | | | | | | | -0.562 | |
| | | | | | | | (0.120) | |
| ODM ethnic coalition share | | | | | | | | 0.158 |
| | | | | | | | | (0.665) |
| "Split" constituencies | 0.482+ | 0.699* | 0.379 | 0.563* | 0.748* | 0.518 | 0.487+ | 0.807** |
| | (0.058) | (0.018) | (0.330) | (0.024) | (0.014) | (0.131) | (0.057) | (0.009) |
| Voters (10,000) | 0.073* | 0.091* | 0.046 | 0.093** | 0.095* | 0.083 | 0.076* | 0.082* |
| | (0.016) | (0.018) | (0.414) | (0.002) | (0.015) | (0.137) | (0.012) | (0.044) |
| Area (sq. km.) | 0.000 | -0.000 | 0.000 | -0.000 | -0.000 | -0.000 | 0.000 | -0.000 |
| | (0.721) | (0.232) | (0.785) | (0.681) | (0.388) | (0.519) | (0.616) | (0.183) |
| Population density | -0.000 | -0.000 | -0.000 | -- | -0.000 | -0.000 | -0.000 | -0.000 |
| | (0.842) | (0.818) | (0.271) | | (0.815) | (0.931) | (0.747) | (0.459) |
| Distance to Nairobi | -0.001 | -0.000 | 0.000 | 0.000 | -0.001 | 0.001 | -0.001 | 0.002* |
| | (0.364) | (0.843) | (0.981) | (0.985) | (0.402) | (0.569) | (0.378) | (0.030) |
| Number of major towns | 0.525** | 0.504** | 0.312 | 0.570** | 0.529** | 0.467* | 0.513** | 0.417* |
| | (0.000) | (0.002) | (0.159) | (0.000) | (0.001) | (0.013) | (0.000) | (0.014) |
| Starehe constituency | 2.284* | 2.305 | 5.630 | 2.349** | 2.263 | 3.166 | 2.355* | 3.067+ |
| | (0.036) | (0.167) | (0.128) | (0.000) | (0.185) | (0.250) | (0.034) | (0.090) |
| Constant | -1.902** | -3.629** | -1.876** | -1.702** | -1.338** | -1.969** | -1.466** | -2.612** |
| | (0.000) | (0.000) | (0.001) | (0.000) | (0.008) | (0.001) | (0.000) | (0.000) |
| Observations | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| Pseudo R-squared | 0.164 | 0.167 | 0.0366 | 0.214 | 0.181 | 0.203 | 0.163 | 0.0993 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

*Notes:* Model 4 excludes population density becaue the model fails to converge with its inclusion.

**F3. Core mobilization as an alternative explanation**

The results in Tables SI.4.11 – SI.4.14 present additional results for models of turnout targeting. I use a measure of average turnout in the two previous elections (1997 and 2002). From this data, I create a dichotomous measure of areas with low turnout, defined as constituencies where average turnout in the two prior races was below the median (65%). I interact this turnout measure with the estimates of constituency-level vote shares for each candidate described above. If the goal was core mobilization, I would expect that parties would target constituencies that were characterized by high levels of initial support and a history of low turnout. The results in Tables SI.4.11 do not support a core mobilization story; neither the low-turnout variable nor the interaction between vote share and low turnout is significant. Table SI.4.12 includes a continuous measure of turnout and likewise shows no evidence in favor of the mobilization story. Table SI.4.13 replicates the original analysis of rally targeting from the main text and shows that the key findings on ethnic composition are robust to the inclusion of the low turnout measure and its interaction with vote share at the start of the campaign. I interpret these results to mean that presidential aspirants did not use rallies to target existing supporters in low-turnout areas. While mobilization was important in the 2007 race, the broader results in the paper (including those that focus on household contact) suggest that the job of mobilizing the core is left to lower-level actors. Table SI.4.14 tests whether candidates target low-turnout areas in their broader ethnic coalitions.

Table SI.4.11. Negative Binomial Regression Models of Presidential Rallies (including turnout)

| | (1)<br>Kibaki<br>(PNU) | (2)<br>Odinga<br>(ODM) | (3)<br>Musyoka<br>(ODM-K) |
|---|---|---|---|
| Candidate vote share at start of campaign | -0.625 | 0.668 | 4.281** |
| | (0.215) | (0.301) | (0.000) |
| Low turnout | -0.123 | -0.138 | -0.700+ |
| | (0.737) | (0.813) | (0.058) |
| Candidate vote share * Low turnout | -0.014 | 0.044 | -0.257 |
| | (0.988) | (0.963) | (0.815) |
| Voters (10,000) | 0.095** | 0.107* | 0.077 |
| | (0.004) | (0.016) | (0.192) |
| Area (sq. km.) | 0.000+ | 0.000 | 0.000 |
| | (0.100) | (0.950) | (0.817) |
| Population density | 0.000 | -0.000 | -0.000 |
| | (0.965) | (0.788) | (0.694) |
| Distance to Nairobi | -0.000 | 0.002 | 0.004** |
| | (0.634) | (0.165) | (0.004) |
| Number of major towns | 0.494** | 0.380* | 0.352+ |
| | (0.000) | (0.027) | (0.061) |
| Starehe constituency | 2.345* | 2.700 | 4.083 |
| | (0.026) | (0.117) | (0.141) |
| Constant | -1.505** | -2.835** | -2.994** |
| | (0.001) | (0.000) | (0.000) |
| Observations | 210 | 210 | 210 |
| Pseudo R-squared | 0.152 | 0.0855 | 0.142 |

p-values in parentheses
** p<0.01, * p<0.05, + p<0.1

Table SI.4.12. Negative Binomial Regression Models of Presidential Rallies (including turnout)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) |
|---|---|---|---|
| Candidate vote share at start of campaign | -3.932 | 0.782 | -0.021 |
| | (0.313) | (0.861) | (0.998) |
| Turnout | -2.141 | 1.181 | 3.597+ |
| | (0.386) | (0.750) | (0.098) |
| Candidate vote share * Turnout | 4.914 | -0.210 | 6.535 |
| | (0.384) | (0.975) | (0.554) |
| Voters (10,000) | 0.091** | 0.114* | 0.086 |
| | (0.010) | (0.014) | (0.149) |
| Area (sq. km.) | 0.000 | 0.000 | 0.000 |
| | (0.101) | (0.915) | (0.725) |
| Population density | -0.000 | -0.000 | 0.000 |
| | (0.930) | (0.954) | (0.924) |
| Distance to Nairobi | -0.001 | 0.002 | 0.004** |
| | (0.456) | (0.141) | (0.003) |
| Number of major towns | 0.506** | 0.380* | 0.378* |
| | (0.000) | (0.027) | (0.049) |
| Starehe constituency | 2.449* | 2.513 | 3.154 |
| | (0.026) | (0.143) | (0.210) |
| Constant | -0.072 | -3.749 | -5.764** |
| | (0.967) | (0.168) | (0.002) |
| Observations | 210 | 210 | 210 |
| Pseudo R-squared | 0.153 | 0.0862 | 0.134 |

p-values in parentheses
** p<0.01, * p<0.05, + p<0.1

Table SI.4.13. Negative Binomial Regression Models of Presidential Rallies (including turnout)

| | (1) Kibaki (PNU) | (2) Odinga (ODM) | (3) Musyoka (ODM-K) | (4) Kibaki (PNU) | (5) Odinga (ODM) | (6) Musyoka (ODM-K) | (7) Kibaki (PNU) | (7) Odinga (ODM) |
|---|---|---|---|---|---|---|---|---|
| Swing group share | 0.613+ | 2.095** | 3.118** | | | | | |
| | (0.055) | (0.000) | (0.001) | | | | | |
| Kikuyu share | | | | -0.430 | -2.943** | -3.187** | | |
| | | | | (0.479) | (0.000) | (0.004) | | |
| Luo share | | | | -3.239** | -1.213+ | -4.932+ | | |
| | | | | (0.005) | (0.057) | (0.055) | | |
| Kamba share | | | | 0.374 | -2.987* | 19.481* | | |
| | | | | (0.319) | (0.024) | (0.032) | | |
| PNU ethnic coalition share | | | | | | | -2.535* | |
| | | | | | | | (0.024) | |
| ODM ethnic coalition share | | | | | | | | -0.630 |
| | | | | | | | | (0.215) |
| Candidate vote share at start of campaign | -0.460 | 0.241 | 8.307** | -0.596 | -0.144 | -31.538* | 2.591+ | 1.385 |
| | (0.371) | (0.715) | (0.000) | (0.412) | (0.830) | (0.049) | (0.091) | (0.109) |
| Low turnout | 0.101 | -0.364 | -0.557 | 0.344 | -0.047 | -0.464 | -0.090 | -0.226 |
| | (0.798) | (0.581) | (0.121) | (0.443) | (0.944) | (0.189) | (0.818) | (0.705) |
| Candidate vote share * Low turnout | -0.478 | 0.881 | -0.573 | -1.275 | 0.302 | -0.688 | -0.565 | 0.040 |
| | (0.629) | (0.425) | (0.600) | (0.284) | (0.786) | (0.520) | (0.596) | (0.967) |
| Voters (10,000) | 0.094** | 0.107** | 0.085 | 0.120** | 0.106* | 0.110+ | 0.105** | 0.110* |
| | (0.004) | (0.009) | (0.147) | (0.001) | (0.011) | (0.058) | (0.002) | (0.011) |
| Area (sq. km.) | 0.000+ | 0.000 | 0.000 | 0.000 | 0.000 | -0.000 | 0.000 | 0.000 |
| | (0.097) | (0.854) | (0.565) | (0.321) | (0.927) | (0.496) | (0.246) | (0.838) |
| Population density | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | -0.000 |
| | (0.977) | (0.984) | (0.843) | (0.348) | (0.972) | (0.796) | (0.949) | (0.741) |
| Distance to Nairobi | -0.001 | -0.001 | 0.001 | -0.000 | -0.001 | 0.002 | -0.001 | 0.001 |
| | (0.183) | (0.473) | (0.494) | (0.838) | (0.369) | (0.153) | (0.210) | (0.410) |
| Number of major towns | 0.522** | 0.497** | 0.453* | 0.554** | 0.512** | 0.499** | 0.507** | 0.367* |
| | (0.000) | (0.002) | (0.015) | (0.000) | (0.002) | (0.009) | (0.000) | (0.029) |
| Starehe constituency | 2.323* | 2.281 | 2.859 | 1.850+ | 2.244 | 2.799 | 2.311* | 2.752 |
| | (0.028) | (0.148) | (0.250) | (0.062) | (0.155) | (0.260) | (0.030) | (0.112) |
| Constant | -1.760** | -3.677** | -5.089** | -1.583** | -1.268* | -1.885** | -1.863** | -2.848** |
| | (0.000) | (0.000) | (0.000) | (0.002) | (0.029) | (0.002) | (0.000) | (0.000) |
| Observations | 210 | 210 | 210 | 210 | 210 | 210 | 210 | 210 |
| Pseudo R-squared | 0.161 | 0.157 | 0.206 | 0.210 | 0.165 | 0.229 | 0.164 | 0.0900 |

p-values in parentheses; ** p<0.01, * p<0.05, + p<0.1

Table SI.4.14. Models of Core Coalition Targeting

| | (1) Kibaki | (2) Odinga | (3) Kenyatta | (4) Odinga | (5) Kenyatta | (6) Odinga |
|---|---|---|---|---|---|---|
| Core coalition share | -0.62* | -0.26 | -0.20 | -2.55*** | -0.14 | -0.11 |
| | (0.37) | (0.44) | (0.58) | (0.57) | (0.37) | (0.39) |
| Core coalition share X low turnout | -0.71 | -0.66 | 0.96 | 1.52** | 0.30 | 0.61 |
| | (0.70) | (0.63) | (0.76) | (0.71) | (0.53) | (0.60) |
| Low turnout | 0.01 | 0.11 | -0.07 | 0.22 | -0.33 | -0.40 |
| | (0.23) | (0.31) | (0.51) | (0.43) | (0.30) | (0.46) |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 210 | 210 | 210 | 210 | 210 | 210 |
| Pseudo $R^2$ | 0.21 | 0.15 | 0.11 | 0.17 | 0.11 | 0.16 |

*Notes:* Negative binomial regressions. The dependent variable in all models is the number of rallies held by the candidate in each constituency. *Core coalition share* is a measure of the population share of groups associated with each candidate's ethnic coalition. See text for explanation of how coalitions are defined. Controls include: the number of voters (measured in 2007), area, population density, distance to Nairobi, a count of major towns (>5,000 population), and a dummy for Westlands constituency. Models also control for the co-ethnic population share of each candidate's main rival(s) (e.g., Luo share and Kamba share for Kibaki 2007). Robust standard errors in parentheses. ***p<0.01, **p<0.05, *p<0.1

# Chapter 5 Supplemental Information

## A. Transcription and translation

Speakers used a variety of languages during campaign rallies, including English, Swahili, and local vernaculars. Transcription and translation was done by a team at Steadman (now Ipsos) in Nairobi in 2008. The first step was to transcribe the speeches in the original languages. The second step was to translate all text into English. The content analysis presented in the main text was completed using the English-language versions of the speeches.

## B. Speakers included in the content analysis of campaign rallies:

Table SI.5.1. Speakers, PNU (% of coded appeals)

| | |
|---|---|
| Mwai Kibaki | 25 |
| Unknown | 22 |
| Uhuru Kenyatta | 5 |
| Lucy Kibaki | 5 |
| Kalembe Ndile | 4 |
| Katuku | 3 |
| Moody Awori | 3 |
| Other (each <3%) | 33 |

Table SI.5.2. Speakers, ODM (% of coded appeals)

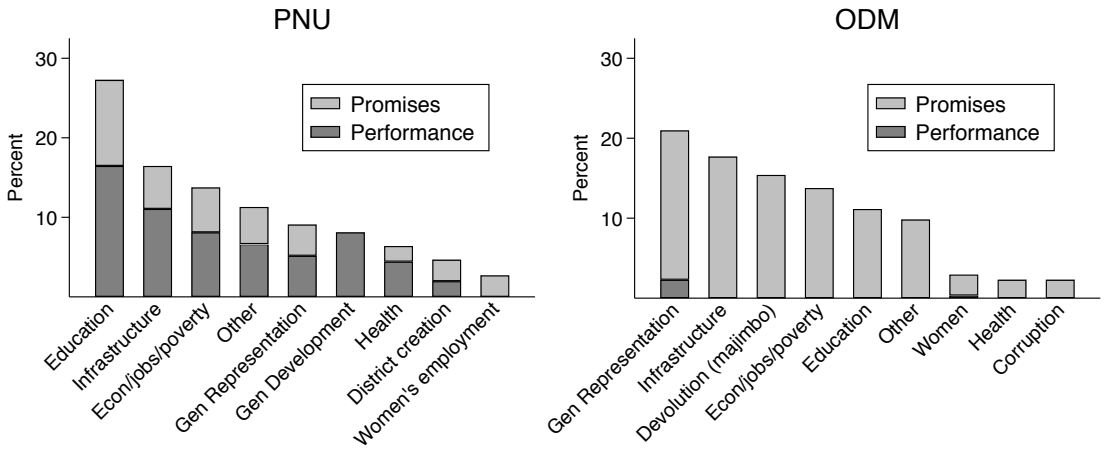
| | |
|---|---|
| Raila Odinga | 51 |
| William Ruto | 12 |
| Najib Balala | 7 |
| Charity Ngilu | 6 |
| Henry Kosgey | 4 |
| Martin Shikiku | 4 |
| Unknown | 9 |
| Other | 7 |

## C. Positive Appeals – retrospective vs. prospective

As shown in Figure SI.5.1, PNU's positive message were divided between performance claims (62%) and forward-looking promises (38%), while nearly all (97%) of ODM's positive appeals were promises about what the party would do if elected. Some differences across the parties were noted with regard to the sectors each emphasized. For PNU, three main issues – education, infrastructure, and economy/jobs/poverty – comprised 57% of all positive appeals, with education being the most frequently-mentioned of the three. These themes are also found in ODM's messaging, accounting for 45% of all coded positive appeals, though for ODM, claims

about the party's representational intentions (coded as General Representation) and those related to devolution (*majimbo*) also featured prominently on the campaign trail.

Figure SI.5.1. Positive Appeals as Performance Claims / Forward-Looking Promises




## D. Additional quotes

The following are additional quotes that relate to the main themes examined in Chapter 5.

**ODM RALLIES**

We persevered a lot under Mr. Moi. Now, instead of retiring, he is trying to deceive us so that we vote for Kibaki. Sincerely, who can stand another five year of being sidelined? Our option is Raila, so that he can tarmac our roads from Kipkareen to Kipsabet, Chepterwai to Rivatex. Are we in agreement? (Henry Kosgey, Nandi North, Dec. 16)

The people of the Coast are very poor…Why should the Coast people live like squatters, such that any time you want to go and plough your *shamba* [farm] or want to own any land you cannot? We are going to do that so that the citizens can go with their title deeds as the security to the bank to acquire loans – those are the things we are going to implement as the first priority. (Odinga, Matuga, Nov. 30)

Kenya has been ruled for forty years in only one way: taking money from the ends to the center…They take money from Hamisi and take it to Nairobi. In the meantime the roads here in Hamisi are not passable…He takes money from Hamisi and builds roads on the other side. He takes money from Hamisi and takes water to the other side. He takes money from Hamisi and takes electricity to the other side. Is this fair really, is that fair? (Odinga, Hamisi Constituency, date unknown)

From the time it attained independence, Kenya has been governed in one way: taking from the ends and bringing to the center. Once it [money] is in Nairobi, they become stingy with it. You only hear the likes of Kimunya [Minister of Treasury, a Kikuyu] speaking…There are no Wamalwas [a Luhya name] there. You cannot hear Wamalwa there. You cannot hear Onyango [a Luo name] there. Every year you wait to hear Mr. Kimunya read out his budget speech. After he reads out his budget you will come to know if there's one road here in Western that will be remembered. Whether water projects have been remembered. Whether electricity has been remembered. If there is none, you wait for the next coming year. If there is none in the next year, you wait for the second year. You remain poor as you wait. Isn't that right? Now, money will come from the center and be brought to Bungoma…And Mr. Kimunya cannot refuse it…You yourselves will sit down with your leaders and decide: this will go to the roads, this will go

towards water, this towards health care, this towards farming, and this towards electricity. And then development will go on in a rapid manner. Would you like it like that? (Odinga, Bungoma, Dec. 21)

If you vote for Kibaki, you know, he knows only his tribe. All the resources will be taken to one tribe. You people of Coast Province, you are living in poverty. You are very rich in resources, but you are dying with hunger…Everywhere you go, you will find the DC [District Commission] is a Kikuyu, the DO [District Officer] is a Kikuyu, the OCS [Officer Commanding Police Station] is a Kikuyu. Does Kenya belong to one tribe? (Charity Ngilu, Magarini, Nov. 2)

Kibaki promised to fight tribalism. I am asking you people from [Eldama] Ravine, has tribalism reduced or increased? Let me give you an example. Where I come from there is an Army training camp, and among those who qualified, out of 1,500, 1,000 were from the Mount Kenya region and the 500 was shared among other places in the whole of Kenya. Is that tribalism or not? (William Ruto, Koibatek, Nov. 18)

Tribalisim is in their front row. If you look at the Ministry of Education, it's under which tribe? (Kikuyu) What? (Kikuyu) Which tribe? (Kikuyu). Ministry of Finance? (Kikuyu) Ministry of Internal security? (Kikuyu). And still they have a government of what kind? (Kikuyu). The one who hates the Kikuyu is Kibaki himself, because he is separating them from the other Kenyans…Raila's government will include all tribes, even the Kikuyu will be in his government, because we do not support favoritism of any kind. (Najib Balala, Kilifi, Nov. 29)

The time of dynasties are over. The dynasty of Kibaki is over…They are managing a company called Mt. Kenya Limited. I want to let them know the Republic of Kenya is not Mount Kenya limited…Let them tell us all the money they have, where it has come from if not from the government? Let them not fool us that they know a lot of business; they only know how to grab public property. The large amount of land they possess, do you think we have such big land here in Mvita? People from Mvita are squatters. Why should Njenga Karume [a Kikuyu] be given land by the government to give to his people, yet Balala can't? I also have my people of Mvita to give land to. People from Mvita also need to be given land…Mvita people should also have a share. (Najib Balala, Mvita, Dec. 10)

I want to tell you that here at the Coast, a lot of things are possible, but we have been discriminated…They should tell us today why there is no single kilometer of road in North Eastern, Taveta, and Lamu. If that is not discrimination of the highest degree. They have been used to discriminating and oppressing us…We have told them to be prepared on 27th because it is not far away. Their forty years of stealing are over and we are going to deal with them. (Najib Balala, Mvita, Nov. 11)

In 2002/2003 taxes for you people were evaluated at 5.5 billion. Those from Kibaki's home area collected 1.8 billion. Nyeri was given 595 million, Meru 417 million through the Ministry of Water…Every [other] place was given 5 million, including Kitui, Ngilu's home area, where people walk for over 40 miles to look for the precious commodity, water. Even Coast Province, which collected about 57.6 billion, were only awarded with 5 million in each district. (Martin Shikiku, Khayega, Nov. 11).

In the Kalenjin community there is no one who is still stupid...You should only vote for a person who will vote for your people…Kibaki is a traitor whose government destroyed the homes of our people. Anyone from our community who campaigns for Kibaki is a traitor**,** because how can you vote for someone who has destroyed your homes? (William Ruto, Keiyo South, Dec. 16)

We want Kibaki to go home…We do not want tribalism…When you go to the Ministry of Finance, the Minister of Finance is Mr. Kimunya. He comes from Nyandarua. His assistant is Peter Kenneth. He comes from Murang'a. The Permanent Secretary, Mr. Kinyua, he comes from Nyeri. The Financial Secretary, he comes from Kiambu. Waweru, the Director General of the Kenya Revenue Authority, he comes from Nyandarua. Is that not tribalism? (William Ruto, Eldoret, Nov. 10)

We Muslims all over Kenya, we have decided that the one who knows our needs…will get our votes, isn't that so? And its only Raila Odinga, because he can be able to know the problems facing Muslims. But Kibaki has taken our children and taken them to Somalia and Ethiopia, and he is punishing our children. He has called us Al Qaeda, that we are terrorist. And we won't allow that. Raila has held our hands…We want freedom for our children, we want

shelter for our children, we want an economy and federalism, and we want to grow like other Kenyans. (Najib Balala, location & date unknown)

The Kibaki government is dismissing all our ministers; our children are being dismissed…Now we are saying, people of Mount Kenya, people of Meru, Embu, we will all be like one person. We will not be misused again. Do we agree with that? (Joseph Nyagah, Meru, Oct. 10)

I want to talk about honorable Raila Odinga…We have come here to ask for votes, so as to make him the President of Kenya…It's like giving out our daughter; you will expect to be paid dowry. We don't give out our daughters blindly. And that is why come next year we will have a new President, with Musalia being the Vice President. Then there is the seat that was initially meant for Raila, the Prime Minister position, will come to our side…Raila becomes the President, Musalia becomes the Vice President, and the other seat comes to us. (William Ruto, Eldoret, Dec. 6)

We have already told the Kikuyus that they will not lead Kenya again. Their time is over, and it is time for another tribe…Kenya is bigger than one tribe. And those Kikuyus do not think about Luos; they don't think about people at the coast; they don't think about the Kalenjin. Why should we vote for them? We are telling them their days are numbered. (Najib Balala, Keiyo South, Dec 16)

My Mvita brothers when we get the federal government we will get a free harbor here in Mombasa. You know what free harbor means – there will be job opportunities and there will be no time for idle talks on the streets. We will be having bundles of cash. If Dubai was a remote area and now it has become rich, why should Mombasa not become rich as well? (Najib Balala, location & date unknown)

**PNU SPEAKERS**

I know how your leader has been working here, doing a good job, being your representative in parliament…He has already talked to the president about the land issue, because the land issue is your main problem. Some of you have already received your title deeds, and we will continue as of next year. Land will continue to be distributed to those with problems…Do not gamble when you are electing so as not to get rid of your MP and later get someone who does not care about your needs. (Lucy Kibaki, Kisauni, Dec. 20)

Us, we have refused the *majimbo* government. When the whole world is coming together so that it can benefit, others are busy trying to divide Kenyans. Is that person [Odinga] thinking about another person? Instead of thinking how we will unite Kenyans, he is just thinking of dividing. That is a person with very little brains…We don't want people whose aim is to bring fighting. We want a calm leader who want everybody and is not tribal. And I want to prove to you Kibaki is that leader, who does not choose tribe or region. (Uhuru Kenyatta, Isiolo North, date unknown)

They have started saying about federalism and destroying personal property. And we don't that to happen. Luhyas, Kikuyus, and Luos have been staying here for a long time, and peacefully without any malice toward each other. If anyone wants to bring about violence, we are telling the Government to take serious actions against them. The CID [Directorate of Criminal Investigations] and the Special Branch should be keen. (Ezekiel Barngetuny, Eldoret South, Dec. 5)

This aspect of ODM, that they are going to bring *majimbo*…people are wondering what *majimbo* really is. People have property here in Rift Valley, and when you talk about *majimbo* to a common person, it has a different meaning…Kikuyus, Luos, Kisiis and people from all over the diaspora have bought property here. Also people from the neighboring countries like Sudan are here in Rift Valley. When you talk about *majimbo*, where do you want the Sudanese who are refugees to go? What we are saying is that think twice about this *majimbo*. (speaker unknown, Eldoret South, Dec. 5)

That Luo [Odinga] who wants to spoil our country, we want to deny him. He wants to spoil our country with *majimbo*, so that he can steal from us. *Majimbo* in our country has no space. It will divide our country along tribal lines, and we want to live as one people, one Kenya. (speaker unknown, Chuka, Nov. 16)

He [Odinga] will lose because he wants to ruin Kenya. Don't be fooled that he is coming to build Kenya…He's bringing devolution. Do you know what devolution is? It is saying that those people here from Kisii, they will go back to Kisii. Do you want that? Those Luos from here, my brothers, they will be told to go back home. Will you accept that?...Don't let anyone fool you. That's what made the Somalia area fall into civil war. These people [ODM] are talking about devolution. They don't understand what they are saying. In Yugoslavia they chose to take up devolution. This resulted in the people fighting amongst themselves, children and mothers died in many numbers. Do we want that? (speaker unknown, Naivasha, date unknown)

Your Excellency [Kibaki], as you can see for yourself, we people of Kitui, we are happy for your visit here. First I would like thank you for the good things your government has done for us. One, our land here is very dry and people were walking miles away looking for water. But now, as I speak, water is easily available in nearby areas. And we thank your government for that good work. Secondly, your Excellency, we thank you for the good roads from Machakos to here, Kitui, from Thika to here, and for your good work that you are still doing…We also thank you for the construction of the Kenya Medical Training College, which is now complete…We cannot also forget the good work that has been done in primary education. A large number of our pupils could not initially go to school due to lack of school fees, and today primary education is free, thanks to your government, just as you promised us…(Titus Mbathi, Kitui, Eastern Province, Oct. 24)

# Chapter 6 Supplemental Information

## A. Main results on primary enrollments, extended back to 1965

Table SI.6.1. Primary Gross Enrollment, 1965-2015

| | |
|---|---|
| Coethnic district | 0.13** |
| | (0.00) |
| Multiparty | 0.15** |
| | (0.00) |
| Coethnic district x multiparty period | -0.18** |
| | (0.00) |
| Coethnic district + (coethnic district x multiparty period) | -0.05 |
| | (0.20) |
| Observations | 1,696 |
| Year and district fixed effects | Yes |
| (controls) x trend | Yes |

*Notes:* Ordinary least squares (OLS) regression on annual county-year gross primary enrollment (number of enrolled students / school-aged population) panel dataset of 41 districts for the period of 1963-2015. Coethnic district is equal to 1 for counties in which the president's ethnic group makes up 50% or more of the population in each year. Multiparty is equal to 1 for years in which opposition parties are allowed to compete in presidential elections (1992-2015). Includes initial controls interacted with a time trend (1963–2015). These controls are district population (1962), district size (square km), urbanization rate (1962), district formal total earnings (1966), formal employment (1963), and value of cash crop exports (1965). Robust *p*-values clustered at district level are reported in parentheses. ** p<0.01, * p<0.05, + p<0.1

## B. Individual-level results on the effects of FPE

To corroborate the findings in the main text, I employ individual data from DHS surveys, which do not suffer from the same limitations as the aggregate district-level data. Unlike prior research using DHS data (Franck and Rainer 2012; Kramon and Posner 2016), I examine school enrollments for primary-aged children within surveyed households at the time each surveys was conducted (rather than cohort-based analysis using responses from adult respondents, all of whom were above the primary-school age at the time of the surveys). Individual-level data is useful both because it allows me to track net enrollment rather than gross, and because it is not limited by ecological fallacy concerns or the changing ethnic composition of districts over time.

The models regress individual enrollment status among children 6-13 on indicators for the FPE period, Kikuyu ethnicity, and an interaction between the two using survey data collected between 1993 and 2014.[1] While the DHS surveys collect information on the enrollment status of all children within each sampled household,[2] they do not record information about children's' ethnicity. I therefore use the ethnicity of the female member of the household who was interviewed for the survey (using the ethnicity of the eldest female respondent when there were more than one per household) to proxy for the ethnicity of children in the household. Controls include indicator variables for household wealth quintile (estimated based on an asset index); indicators for religion (Muslim, Catholic, Protestant) based on the response given by the eldest interviewed female member of the household, the child's gender, an indicator variable for urban, and year and district fixed effects (based on the original 41 districts). Arid and Semi-arid lands (ASAL) districts, which contain about 4% of the population, are excluded because they were not sampled in the 1993 and 1998 surveys. Standard errors are clustered by household.

As shown in Table SI.6.2, the results in model 1 show that the effects of FPE – in this case on net enrollment – were greater for non-Kikuyus than for Kikuyus (as indicated the negative and significant coefficient on the interaction term) across the entire time period for which DHS data is available (1993 to 2014).[3] Model 2 narrows the timeframe to a 10-year window around the introduction of FPE, drawing on data from the 1998, 2003, and 2008/09 DHS surveys, and again shows that the effects of FPE were greater among non-Kikuyus.

[1] A prior DHS survey, conducted in 1989, is excluded because the survey does not provide information on district.
[2] The question used to measure children's enrollment status varies across survey years: 1993 and 1998: Is (NAME) still in school? 2003: Is (NAME) currently attending school? 2008/09 and 2014: Did (NAME) attend school at any time during the [2008/2014] school year?
[3] One limitation of the DHS data is that it does not indicate whether children are enrolled in public or private schools, a significant limitation given the rapid expansion of private schooling starting in the 1990s. How-ever, as shown in Table 5.8, available micro-level data from other surveys conducted in the 1990s and 2000s indicate that rates of private school enrollment for Kikuyu and non-Kikuyu children were similar before and after the introduction of FPE in 2003.

Table SI.6.2. Effects of Free Primary Education on Enrollment among School-aged Children

| | (1)<br>1993-2014 | (2)<br>1998-2008/09 |
|---|---|---|
| FPE | 0.25*** | 0.10*** |
| | (0.00) | (0.00) |
| Kikuyu | 0.06*** | 0.05** |
| | (0.00) | (0.01) |
| FPE x Kikuyu | -0.05*** | -0.03* |
| | (0.00) | (0.09) |
| FPE + (FPE x Kikuyu) | 0.20*** | 0.08*** |
| | (0.00) | (0.00) |
| Observations | 58,102 | 22,167 |
| Controls | Yes | Yes |
| Year and district fixed effects | Yes | Yes |

*Notes:* Ordinary Least Squares (OLS) regression in which the dependent variable takes a value of 1 for primary-age respondents (6-13) who were enrolled in school, and 0 otherwise, at the time that each survey was conducted. Data is from surveys carried out in 1993, 1998, 2003, 2008-09, and 2014. The ethnicity of respondents is proxied by the ethnicity of the female member of the household who was interviewed for the survey (using the ethnicity of the eldest female respondent when there were more than one per household). Free primary education is coded as 1 for 2003-2014. Controls include indicator variables for household wealth quintile; indicator variables for religion (Muslim, Catholic, Protestant) based on the response given by the interviewed female member of the household, the child's gender, an indicator variable for urban, and year and district fixed effects. District fixed effects are based on the original 41 districts. ASAL districts, which contain about 4% of the population, are excluded because they were not included in the 1993 and 1998 surveys. The linear combination of coefficients for Kikuyu + (Kikuyu X FPE) shows that a gap be-tween Kikuyu and non-Kikuyu children persisted after the introduction of FPE, but the interaction term (Kikuyu X FPE) shows that the gap declined after the introduction of FPE. Data weighted to account for oversampling using DHS weights. P-values in parentheses. Standard errors clustered by household. ***p<0.01, **p<0.05, *p<0.1

These results are most directly comparable to those in Table 6.3 in the main text based on district-level aggregate data. One notable difference is that the individual data in Table SI.6.2 show a positive and significant increase (8%) in enrollment for Kikuyu children, while the results in Table 6.3 show a small (varying from 1 to 4%) but insignificant increase in enrollment in Kikuyu-majority areas. The difference may stem from at least two sources. First, because the DHS surveys do not indicate public vs. private attendance, the individual-level data in Table SI.6.2 may be picking up the slightly larger shift into private schools among Kikuyu children across the time period. Second, because advancement rates are better among Kikuyu children, the introduction of FPE may have brought fewer non-primary-age children into the system from Kikuyu families, producing a larger effect on net enrollment (Table SI.6.2) than on gross enrollment (Table 6.3).

## C. Varying the time window for the effects of FPE

The difference-in-difference analysis of the short-term effects of FPE on enrollments in Table 6.4 in the main text relies on data from five years before and after the introduction of FPE. Table SI.6.3 employs varying time windows - 1 to 10 years before/after - to shows that the results in Table 6.4 are robust to alternate specifications. The results show that FPE had large positive effects in non-Kikuyu districts starting for all time windows two years before/after FPE or greater, and that the effects were smaller in Kikuyu-majority districts for all time windows three years before/after FPE.

Table SI.6.3. Effects of FPE, Difference-in-Difference Analysis Estimated with Varying Time Windows

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) |
|---|---|---|---|---|---|---|---|---|---|---|
| Years before/after | 1 year | 2 years | 3 years | 4 years | 5 years | 6 years | 7 years | 8 years | 9 years | 10 years |
| FPE | -0.12** | 0.12** | 0.13** | 0.14** | 0.11** | 0.11** | 0.11** | 0.11** | 0.12** | 0.12** |
| | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Kikuyu district | 0.12* | 0.15* | 0.13* | 0.11+ | 0.10 | 0.08 | 0.10 | 0.11+ | 0.11 | 0.11+ |
| | (0.04) | (0.02) | (0.05) | (0.09) | (0.14) | (0.21) | (0.11) | (0.09) | (0.10) | (0.09) |
| FPE x Kikuyu district | 0.01 | -0.04 | -0.06+ | -0.07+ | -0.09* | -0.12** | -0.14** | -0.15** | -0.16** | -0.16** |
| | (0.60) | (0.20) | (0.10) | (0.09) | (0.02) | (0.00) | (0.00) | (0.00) | (0.00) | (0.00) |
| Observations | 80 | 160 | 240 | 320 | 400 | 479 | 559 | 599 | 639 | 679 |

*Notes:* Ordinary least squares (OLS) regression on annual district-year gross primary enrollment (number of enrolled students / school-aged population) panel dataset of 40 districts. Models 1 to 10 vary the time period for analysis from a 2-year window around the implementation of Free Primary Education in January 2003 to a 20-year window in Model 10. FPE is equal to 1 for years in which for years in which primary education was free (2003-2012). Kikuyu district is equal to 1 for districts in which Kikuyus makes up 50% or more of the population. All models includes controls for: 1. economic conditions (total earnings, wage employment, and a proxy for total economic activity based on the NOAA nighttime lights images); school inputs (the number of primary schools (interpolated for years when data is not available), Constituency Development Fund (CDF) expenditures on education and school bursaries); and demographic factors (population size (interpolated from decennial census data), area (in sq. km.), population density, and an indicator variable for the eight districts that are categorized as Arid or Semi-Arid Lands (ASAL). Robust *p*-values clustered at district level are reported in parentheses. ** p<0.01, * p<0.05, + p<0.1

## D. Why Were the Benefits of FPE Greater among Non-Kikuyus?

Why were the benefits of FPE lower in Kikuyu areas relative to other parts of the country? One answer relates to enduring socio-economic differences: because Kikuyus have traditionally been better off on average than members of other communities, school fees prior to 2003 likely posed less of a barrier for Kikuyu families, meaning that fewer Kikuyu families would have benefited from their removal. Micro-level data from two large-scale household surveys conducted shortly before and after the adoption of FPE in 2003 support this explanation. I draw on data from the 1999 Welfare Monitoring Survey (WMS) and the 2005/06 Kenya Integrated Household Budget Survey (KIBHS), conducted by the Kenya National Bureau of Statistics.[4]

Table SI.6.4, which provides estimates of the proportion of primary-age children that had never attended school in Kikuyu and non-Kikuyu districts, confirms that there was a larger pool of potential beneficiaries outside of Kikuyu areas.[5] The 1999 data shows that non-participation rates were substantially higher in non-Kikuyu areas, where 13.4 percent of primary-age children had never attended school relative to only 4.2 percent in Kikuyu areas. Data from 2005/06 shows that the non-participation rate declined by a larger margin (6.9 percentage points) in non-Kikuyu areas, relative to 2.3 points in Kikuyu-majority districts, potentially an indication that school fees were a greater inhibitor to participation outside of Kikuyu areas. Consistent with this interpretation, data from the 1999 survey in Table SI.6.5 shows significant differences in wealth between Kikuyu and non-Kikuyu areas using a variety of measures (adult employment, household assets, rooms per number of people that sleep in the dwelling, and roofing materials).

Table SI. 6.4. Percentage of Primary-age Children Never Having Attended School

| | 1999 | 2005/06 |
|---|---|---|
| Kikuyu districts | 4.2 | 1.9 |
| Other districts | 13.4 | 6.5 |

*Notes:* Data weighted by cluster; districts classified as Arid and Semi-arid Lands (ASAL) – roughly 2.3% of the overall population – are excluded because the 1999 sample frame was limited to urban centers in ASAL areas. Primary-age children are defined as ages 6 to 13.

[4] The 1999 WMS includes information on 50,713 respondents from 10,874 households. The 2005/06 KIBHS includes information on 59,096 respondents in 13,430 households.

[5] Ideally, we would also want to know about students who had begun primary but had dropped out, as these individuals would also be potential beneficiaries of FPE. This information, however, is not available from the WMS and KIBHS surveys.

Table SI.6.5. Wealth Indicators, 1999

| | Adult employment | Asset index | Rooms per person | Iron roof |
|---|---|---|---|---|
| Kikuyu districts | 69.0 | .19 | 1.01 | 86.5 |
| Other districts | 54.7 | -.06 | 0.84 | 55.3 |
| *Difference* | *14.3*** | *.25*** | *.16*** | *31.2*** |

*Notes:* Difference of means estimates based on t-tests. ** p<0.01, * p<0.05, + p<0.1

Other group-level differences appear to be less helpful in explaining the differential effects of FPE. Because Kikuyus are concentrated in Central province, an area that is more densely populated than other parts of the country, one might expect that the distance to the nearest primary school would be lower in Kikuyu-majority areas, perhaps accounting for higher enrollment rates prior to 2003. However, data from the 1999 survey shows that there was no difference in reported travel times to the nearest primary school between Kikuyu and non-Kikuyu districts (the median for both areas was 20 minutes), suggesting that it was fees, not distance, that was the more important inhibitor of access in non-Kikuyu areas prior to 2003.

Finally, I explore whether the smaller effect of FPE in Kikuyu areas may have stemmed in part from disproportionate exit from public primaries to private schools. Prior to the 1980s, few private schools existed in Kenya; however, after the mid-1980s there was a rapid increase in private education at all levels (Nishimura and Yamano 2012; Bold et al. 2013; Bold et al. 2014; Lucas and Mbiti 2012). The adoption of FPE in 2003 led to an increase in pupil-teacher ratios in public schools, a change that might have disproportionately pushed Kikuyus into private schools due to the greater ability to pay the higher costs of private education. While this would not invalidate the results in Table 6.3, it would suggest a different mechanism – one rooted in differential rates of exit from the public system, not differential increases in access across ethnic communities. The available data, however, suggest that this was not the case. First, data in Table SI.6.6 shows that the increase in the student-teacher ratio from 2002 to 2004, the years directly before and after FPE, was smaller in the Central Province, where Kikuyu-majority districts are concentrated, than in other parts of the country, and in both 2003 and 2004 the student-teacher ratio remained lower in Central province than in most other parts of the country – suggesting that the incentives to exit the public system should have been lower for Kikuyu families than for those elsewhere. Second, data from the 1999 WMS and 2005/06 KIHBS surveys in Table SI.6.7 shows that while the increase in private-school enrollment was larger in Kikuyu-majority districts than other parts of the country, the differential was small. In sum, FPE disproportionately increased enrollments among non-Kikuyus in public schools, and it did so because school fees were a greater barrier to non-Kikuyu families prior to the 2003 reforms.

Table SI.6.6. Pupil-Teacher Ratios in Public Primary Schools, 2002 and 2004

| | 2002 | 2004 | Change |
|---|---|---|---|
| Central | 33.0 | 36.5 | +3.5 |
| Rift Valley | 33.1 | 38.1 | +5.0 |
| Eastern | 31.5 | 36.9 | +5.4 |
| Nyanza | 34.4 | 40.3 | +5.9 |
| North Eastern | 38.2 | 45.6 | +7.4 |
| Western | 40.1 | 48.0 | +7.9 |
| Nairobi | 35.3 | 48.5 | +13.2 |
| Coast | 35.1 | 48.8 | +13.7 |
| National Average | 34.1 | 40.3 | +6.2 |

*Notes:* Data from Teachers Service Commission (cited in World Bank 2009).

Table 6.7. Private school enrollment, primary-age children

| | 1999 | 2005/06 | Change |
|---|---|---|---|
| Kikuyu districts | 2.7 | 15.7 | +13.0 |
| Other districts | 4.2 | 14.9 | +10.7 |

*Notes:* Data weighted by cluster; districts classified as Arid and Semi-arid Lands (ASAL) – roughly 2.3% of the overall population – are excluded because the 1999 sample frame was limited to urban centers in ASAL areas.