# GHANA'S SWING VOTERS

## Results from a Panel Study Following Voters through the 2016 Campaign

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ABSTRACT: Ghana is a country where presidential election results are not a fore-gone conclusion and parties can count on very few safe seats in the legislature. This lack of electoral predictability suggests that a significant block of Ghanaian voters are persuadable. But how are these persuadable voters different from their unpersuadable counterparts? We comb through the swing voter literature for potential answers to this question and weigh these answers using evidence from an innovative panel study that followed Ghanaian voters in the Nabdam constituency through the 2016 campaign. Our findings generally do not support

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most of the well-trodden predictive theories of swing voters, but one finding does stand out: would-be voters who identify themselves as supporters of the minority party are far more likely to swing than supporters of the majority party. This finding suggests political parties may want to focus more of their efforts on persuading these anomalous voters even in areas considered strongholds.

## Introduction

Candidates were well aware of Ghana's election history as they prepared for the 2016 general elections. In the Fourth Republic, there had been six national elections. Like clockwork, after one party served two terms in power, the majority of voters would give the opposition a turn. Jerry John Rawlings and the National Democratic Congress (NDC) had their eight-year term (1993–2000), then John Kufuor and the New Patriotic Party (NPP) had their tenure (2001–2008), and so on. In December 2016, the NDC hoped to break the pattern and the NPP were looking to continue it. Given Ghana's electoral volatility, electoral observers knew there were always voters who had no firm convictions about which party to vote for—as did the presidential and parliamentary candidates and their campaign staffs.[1] Regardless of whether one calls them swing voters, floaters, persuadable, or undecideds, their value was without question.[2] Everyone wanted these voters to lean in their direction (Ayee, 2017).

Despite their value, however, we know very little about who these swing voters are or how they are created in Ghana. This article takes a step toward filling this lacuna by analyzing data from a panel study conducted during the 2016 campaign. Once a month, from June 2016 through the election in December, we asked registered voters who they planned to vote for. In the weeks after the election, we followed up by asking them whom they ended

1. The 2016 presidential election had the added uncertainty of having a party (the NDC) in power for eight years, but a presidential candidate (also from NDC), John Mahama, who had only served a little more than one full term because of President John Atta Mills' passing in July 2012.
2. There are many terms used to describe this phenomenon in the literature. We use the terms "electoral free agents," "undecided," "persuadable," "swing," and "floating" voters interchangeably.

up casting a ballot for. This gave us an opportunity not only to see who admitted to changing their mind after the fact, but who changed their mind in real time. In so doing, we found that several well-trodden hypotheses from the global literature on swing voters were not supported in the Ghanaian case. What is consistent across both presidential and parliamentary elections is the way a community's partisanship shapes partisan outliers. Our study shows that Ghanaian voters who do not support their community's dominant party are the voters most reluctant to stick to a single candidate throughout the campaign.

## Undecided Voters

Within the Africanist and Ghanaian political science literature, there is a small library on swing voters. These voters are constituents who, as Mayer (2007, p. 359) describes, "could go either way, a voter who is not so solidly committed to one candidate or the other as to make all efforts at persuasion futile." Using survey data from southern Ghana, Lindberg and Morrison (2005) estimate that approximately one in five Ghanaian voters fit into this category. Though there are certainly voting patterns that repeat themselves across multiple elections (Asante & Gyimah-Boadi, 2004; Debrah, 2016; Frempong, 2001; Fridy, 2007a; Nugent, 1999), that Ghanaian voters have regularly alternated their choice of who comes into power illuminates the substantive effect of having so many electoral free agents. If Ghanaians wedded to one political party or the other (core voters) can explain the status quo in Ghanaian politics, it is these persuadable (swing) voters who can explain the disruptions in Ghanaian politics. But what attributes distinguish a swing from a core voter? There are generally two non-exclusive ways to answer this question. One focuses on actions of the candidates and the other on characteristics of the voters.

The actions candidates may take to sway voters in their direction take an infinite number of forms, but we focus on the residuals of three common activities: gifts, past performance, and information. Clientelism is transactional. Politicians exchange material favors for votes. Wantchekon (2003) notes that this strategy appears to be the most successful when utilized by incumbents who, because of their access to the largesse of the state, are best equipped to deliver the meaningful benefits they promise. Early on, this exchange was described as unmitigated (Lemarchand & Legg, 1972), but more recently, gifts as an electioneering strategy are understood as necessary, but not sufficient, components of wooing persuadable voters (e.g., Abdulai & Hickey, 2016; Gadjanova, 2017; Guardado & Wantchékon, 2018; Weghorst & Lindberg, 2013). Rather than personal targeted benefits, the retrospective

voting hypothesis relies on the successful provision of communal goods in the immediate past (Fiorina, 1981). Whereas core voters stick with their candidates regardless of their performance, swing voters see what incumbents have brought to their community by way of development. If it meets their expectations, they vote in favor of the status quo. If they believe their representatives have not done a good job, they vote for a challenger (e.g., Adams & Agomor, 2015; Adams, Agomor, & Youmbi, 2018; Armah-Attoh & Robertson, 2014; Hoffman & Long, 2013; Ziblim, 2016). Gifts may open a new door and past experience may signal voters whether they should walk through it or not, but how successfully a candidate connects with voters may also matter. Conroy-Krutz (2016) finds that campaigns can narrow the informational gap between privileged and disadvantaged citizens. They are especially good at convincing voters that their ballots are secret. It is not a stretch to speculate that having more knowledge and confidence that ballots are secure may lead potential voters to reconsider, and perhaps recalculate their voting preferences. If, on the other hand, voters attend campaign events as a public announcement of their loyalty, as Paller suggests (2019, p. 148), perhaps the relationship between following a campaign and being an undecided voter is negative.

If swing voters are created by their personal attributes, a candidate's actions may pull them one way or the other; however, the fact that they are swayable is based partly or wholly on who the voter is. Though demographic and socioeconomic controls like gender, age, and education have been used in many of the empirical tests cited here, only ethnicity has received attention as a frontline independent variable in the search for determinants of electoral persuadability in Africa (Fridy, 2012; Horowitz, 2019; Taylor, 2017). Regarding demographics, evidence of a relationship to swing voters from Western cases is thin (Mayer, 2008, pp. 25–27). It is not unreasonable to hypothesize, however, that the life experiences associated with certain demographic categories may make one more or less willing to hear the appeals of multiple candidates for office simultaneously. Gender (Eckel & Grossman, 2008; Schaffner, 2005), age (Kaid, McKinney, & Tedesco, 2007; Plutzer, 2002), and education (Ferree, Gibson, Hoffman, & Long, 2009; Weghorst & Lindberg, 2013) have all been presented as promising aspirants for independent variables. Issue concerns in African politics, such as characteristics of individuals, took a back seat for much of the independence era (Mafeje, 1971). Things are starting to change as scholars increasingly find that African voters can be swayed by these considerations (Bratton, Bhavnani, & Chen, 2011; Kim, 2018). Not only do voters' background characteristics matter, but what they see as the biggest challenges facing people like themselves may influence which voters find themselves comfortably in one party's core group

and which voters find themselves swinging back and forth. Partisanship is the final individual level variable considered here. As Robinson and Torvik (2009, p. 314) note, electorates vary in how tied "core" voters are to their party and how obtainable "swing" voters are. Benefiting from a stable, peaceful, and free two-party system that dates back to 1992 officially—but with roots going back to the 1950s (Fridy, 2018)—one would expect Ghanaian voters to spread themselves out across the spectrum from hardcore partisans through nonpartisans, with swing voters more prevalent in the latter category.

From these two potential paths to the creation of swing voters—one looking at activities of the campaigners and one focusing on attributes of the voters—we recognize six groups of hypotheses. Some of these hypotheses have strong *a priori* causal directions theorized as positive or negative. For the purposes of our article, a positive relationship indicates that as the levels of our independent variable increase, so too does the likelihood of someone being a swing voter. Negative relationships indicate that, as our independent variable increases, the likelihood of being a swing voter decreases. For other hypotheses, the relationship between the independent variable and voting behaviors is established empirically in the literature, but whether or not the independent variable impacts a voter's persuadability positively, negatively, or not at all is undertheorized. "What makes a voter waffle?" is an important, but peripheral question in a larger library on "What makes voters vote the way they do?" and, as such, is often addressed more implicitly than one would like. In these cases, we engage in hypothesis generation and speculate on causal mechanisms that could explain a positive or negative relationship.

**H1: Clientelism**—Incumbents tend to be viewed as more credible when it comes to promises of clientelism, but several scholars have argued that "dash" or "gifts" are the price of contesting for public office. What we do not know is whether gifts are used primarily to reward core voters or to lure swing voters away from an opponent. If it is the former, we should expect a negative relationship between receiving a gift and changing one's vote. If it is the latter, we should expect a positive relationship.

**H2: Retrospective Voting**—If voters think the incumbent candidate did relatively well over the last term, they are likely to reward them with a vote. If they think the incumbent party performed inadequately, they have two options: either to vote for the opposition or to, at least, consider voting for the opposition. While not every voter who thinks the incumbent was ineffective will become a swing voter, we expect these unsatisfied respondents to be more likely to swing than those who are satisfied.

**H3: Campaigns**—The literature on this hypothesis is bifurcated. Nabdam constituency is entirely rural and one of Ghana's poorest. Evidence suggests that voters like the median Nabdam can dramatically improve their

knowledge of political candidates and institutions by following political campaigns. One campaign hypothesis is for a positive relationship between attending campaign events and considering vote switching. If, on the other hand, campaign events are understood by attendees as an opportunity to show their loyalty to a particular candidate rather than a learning opportunity, a second reading of this hypothesis would be for a negative relationship between campaign event attendance and the likelihood of swing voting.

**H4: Demographics**—Most of the literature suggests things like gender, age, and education are at best unpredictably tied to voter persuadability. We therefore expect the null hypothesis to prevail here. These control variables should give no better way to predict who is a swing voter and who is not, than a random assortment.

**H5: Issue Concerns**—If a voter cares deeply about the environment and one of the candidates shares their concerns but the other does not, it is easy to predict who will win their vote. But what if the voter's issues are not addressed adequately by any of the candidates? We predict some issues will push voters toward core voter status and other issue concerns will encourage voters to be more malleable.

**H6: Partisanship**—A previous swing voter is more likely to be a swing voter again. For self-identified partisans, we do not anticipate one party's voters being more likely to swing than the other.

## Nabdam Panel

Data presented in this article are from panel surveys conducted in Ghana's Nabdam constituency. The sample includes 100 participants interviewed in person in June 2016 and thereafter by phone once a month from July to December 2016. This made for seven rounds of surveys with six occurring before, and one after, Ghana's December 7, 2016 national election. Participants shared their opinions about the election before general election campaigns heated up, through the heart of the campaign season, and after casting their ballots.

Because building a representative sample in rural Ghana is a challenge and panel surveys are notoriously difficult even under optimal conditions, we spend some time discussing the survey enumeration before delving into the survey questions. To select (1) sites, (2) households, and (3) individuals, we employed a multistage cluster sampling technique Though inspired by the well-regarded Afrobarometer (2017) sampling protocols, we made several adjustments due to the panel nature of the study and the density of surveys (N=100) in a relatively sparsely populated area (33,826 residents at the time of the 2010 housing census).

Figure 1. Map of Nabdam.
*(Author produced map. Source materials include Directorate of Overseas Surveys (1963), Ghana Statistical Service (2014), Hunter (1968), an unpublished map of community boreholes provided by Christopher Tii Mbabil, and personal observation. The community boundaries depicted in this map are estimates.)*

Instead of relying on a random draw of Ghana Statistical Service enumeration area maps to identify our sites, we began by stratifying the constituency into known communities. Since "community" is not a formal government-assigned designation with reified geographical boundaries, the enumeration team (consisting of three residents of Nabdam) used a consensus approach to identify communities. Among the group, eleven were identified in total (see Figure 1).[3] Population totals in these eleven communities are not

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3. These communities match the ten clans of Nangodi—identified by Hunter (1968)—plus Sekoti, which has its own paramountcy. This list is more concise than the 22 Nabdam clans described by Rattray (1932, pp. 366–373).

### Table 1. Comparison of Community Population Size to Sample Distribution

| Community | 2004 Valid Votes (Percentage of Constituency) | Mobile Telephones Distributed |
|---|---|---|
| Dagliga | 504 (5%) | 4 |
| Damologo | 665 (6%) | 6 |
| Dusobilogo | 287 (3%) | 4 |
| Kongo | 1,475 (14%) | 14 |
| Logri | 686 (6%) | 6 |
| Nangodi | 1,832 (17%) | 18 |
| Pelungu | 746 (7%) | 8 |
| Sekoti | 2,083 (20%) | 18 |
| Tindongo | 496 (5%) | 4 |
| Zanlerigu | 1,499 (14%) | 14 |
| Zoa | 376 (4%) | 4 |

Source: 2004 polling station results were obtained from the Upper East Regional Electoral Commission office in Bolgatanga.

equal, but census data does not publicly record numbers of inhabitants at such a micro-level. We therefore relied on Electoral Commission results to weight the communities. We had access to the 2004 presidential results from Nabdam broken down by the 33 constituency polling stations.[4] Some communities (like Dusobilogo, Tindongo, and Zoa) are relatively small and have only one polling station. Others (like Nangodi and Sekoti) have at least half a dozen. Though vote totals from twelve years ago do not give precise population estimates, for our purposes they offer reasonable approximations. Unless some communities are growing at rates exponentially different from others and/or turnout is dramatically different in these otherwise similar communities, these proxies for population should not be wildly inaccurate. We see no anecdotal evidence that either of these scenarios is the case.

Table 1 shows what the total valid votes cast in the 2004 presidential contest and the percentage of Nabdam's vote in each community represented. It also shows how many of the 100 participants in our sample were selected from each community. Even numbers of respondents were selected in each location so our survey could have gender parity at the community level. This, and the fact that respondents come in whole units, makes it impossible to exactly match vote totals from 2004, but we are extremely close, far closer than we would likely be with a random selection given our modest N.

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4. These numbers were provided by Idrissu Mahama of the Bolgatanga Electoral Commission office (Fridy, 2007b, p. 179).

Once in a community, we began our selection of participants with a site walk-through. Because our initial interviews took place at the beginning of the rainy season and Nabdam is predominately a farming community, these walk-throughs took place during the late afternoon when the sun was hot, and most residents had returned home from the fields. According to the 2010 census (2014, p. 45), more than 95 percent of households in Nabdam engage in agriculture, with millet being the dominant crop. Administering our survey early in the rainy season benefited the representativeness of our sample, as this is the time of year when most people come home from seasonal migrations to help on the farm (Rademacher-Schulz, Schraven, & Mahama, 2014, p. 50). The purpose of this walk-through was to select the approximate center of the community. From there, the three enumerators would randomly draw a cardinal direction from a cup containing small pieces of paper labeled north, east, south, and west. Then, we followed a modified Afrobarometer (2017, p. 37) sampling protocol for "sparsely populated rural areas, with small villages or single-dwelling farms." Each enumerator would count five households from our start point, or their last interview, in their cardinal direction.

At each household, whoever answered the door was asked for the first names of the adult males if it was an even-numbered survey, and adult females if it was an odd-numbered survey. These names were written down as they were called. Then a six-sided die was rolled. The die selected the interviewee. If, for instance, there were two males living in the household and the die landed on number four, the enumerator counted the first name, the second, then went back to the first, and finally counted to four on the second name. It was via this method that interviewees were selected. If the interviewee was at home and agreeable, the interview commenced. If the interviewee was away but would be back within a week, a return visit was agreed upon. Substitutions of the next household were only made after two unsuccessful return visits. The informed consent form was read to selected respondents, who were given the opportunity to opt out. If they did not opt out, the interview proceeded in English or Nabt. Table 2 displays how the sample built by this approach compares to known census figures from half a decade prior. Though our sample was slightly more educated, the similarities between the right sample column and the left census column are clear.

During this initial interview, we accomplished two tasks. First, we conducted an interview collecting baseline data on variables like gender, age, education, socio-economic status, personality, and political history. This initial in-person interview was more than 60 questions long, whereas follow-up interviews were between a third and half that length. Second, we attached this demographic information to a telephone number we registered in the

## Table 2. Sample Socioeconomic Characteristics Compared to Census 2010 Data

|                 | Nabdam Sample (2016)                                                  | Census (2010)                                                       |
|-----------------|-----------------------------------------------------------------------|----------------------------------------------------------------------|
| Education       | None (50%)<br>Basic (32%)<br>Secondary (13%)<br>Post-Secondary (6%)   | None (60%)<br>Basic (33%)<br>Secondary (5%)<br>Post-Secondary (2%)  |
| Age*            | Mean (38)<br>Median (35)                                              | Mean (40)<br>Median (36)                                            |
| Flooring        | Cement (61%)<br>Earth/Mud (39%)<br>Other (0%)                        | Cement (61%)<br>Earth/Mud (37%)<br>Other (2%)                       |
| Drinking Water  | Borehole (89%)<br>Other (11%)                                        | Borehole (73%)<br>Other (27%)                                       |
| Toilet          | Bush (91%)<br>Toilet (6%)<br>Pit Latrine (3%)                        | Bush (95%)<br>Toilet (4%)<br>Pit Latrine (1%)                       |

Source: Census data comes from Ghana Statistical Service (2014).
* We only interviewed individuals who had reached the age of 18. Therefore, the mean and median for the survey draws from a population aged 18 and above. The estimated mean and median for the census are also adjusted so that only adults are included. Were these figures representing the entire population of Nabdam, the average and median age would both be in the low 20s.

interviewee's name and gave all participants a large battery mobile telephone.[5] In 2010, less than one in five Nabrug over the age of twelve owned a telephone (Ghana Statistical Service, 2014, p. 39). By 2016, this number had increased slightly but was still not quite one in three according to our sample. Had we not provided telephones, our panel survey would either have had to be in person or we would have had a sample heavily skewed toward the young and better-educated. In providing a large battery telephone, we made sure not only that all our respondents could answer additional rounds of questions, but that their phones would hold a charge for several weeks and provide the added benefits of a mobile charging station and a light, making it a valuable item to maintain.

In exchange for the telephones, respondents agreed to answer approximately 10 minutes' worth of questions once a month through December. As long as they continued to answer our questions, we forwarded them the equivalent of approximately 1 USD in airtime the week before we called. This monthly call came from the same telephone number identified as SURVEY

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5. The telephones provided to all participants were X-Tigi S18 brands. We used Vodafone SIM cards because they had the best service in the constituency at the time.

in their phone contact list. If they missed a call from SURVEY, they were to "flash"[6] back within three days so SURVEY could call them back. If we did not get a call back within those three days, we would try again up to three times. These follow-up telephone interviews in July, August, September, October, November, and December were conducted in English or Nabt, depending on the interviewee's preference. To ensure we were speaking with the same individual who answered our initial survey and not a family member or a friend, we asked three questions at our initial interview: (1) what is your favorite soup? (2) what is the farthest place you have traveled? and (3) who is the first person you voted for? For an interview to proceed, respondents had to re-answer one of these questions accurately. Responses were merged with the original in-person responses via the shared telephone number.

Panel surveys are plagued by attrition (Alderman, Behrman, Watkins, Kohler, & Maluccio, 2001; Bignami-Van Assche, 2003; Biruk, 2018, pp. 154–164). It is not at all unusual to lose ten percent of a sample each year (Norris, Richter, & Fleetwood, 2007, p. 1147). Respondents die, lose or sell their telephones, or move, and some simply decide they no longer want to participate. If the respondents who leave are substantively different from the respondents who stay, researchers are left with a serious selection bias problem. We tried to replicate the panel model described here in Accra two years later to prepare a potential national study for election 2020, but the attrition rate was unacceptably high, and the study terminated prematurely. The Nabdam study had several factors working to its advantage and we were able to achieve a perfect rate of retention. Some of these advantages are shared with our ill-fated Accra study and fall in the realm of best practices: we had well-trained professional enumerators, used the same enumerator to distribute in-person surveys and conduct phone interviews (for the sake of familiarity), conducted calls in the local language if that was the respondent's preference, offered competitive compensation for participation, provided telephones well-suited to an environment where electricity was unpredictable, and had a well-established multiple call-back procedure (Lynn, 2018). Other advantages are unique to the Nabdam research site and this project. First, the study was brief in duration, lasting six months from start to finish, and the intervals between interviews averaged one month. Second, Nabdam is a small community where nearly everyone knows each other,

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6. In Ghanaian slang terminology, to "flash" a recipient's mobile phone is to ring their number long enough for the caller's number to be displayed on the recipient's call display, and then to ring off. This is used to notify the recipient that the caller is ready for the recipient to ring back.

either personally or through close intermediaries. We have been working in the area for nearly two decades and this builds a level of trust and mutual respect into the design that is difficult to replicate spontaneously. Nabdam is also quite poor and rural, leading to the types of communal arrangements Hyden (1980) has labeled "economies of affection." Though we have no way to test the hypothesis, we attribute our retention level at least partially to Nabdam's social-capital-rich environment and to our position, and the position of our enumerators, within this environment (Sandbrook, 2014, pp. 239–242).

## Defining Swing Voters

Using the surveys, we operationalized our dependent variable (undecidedness) in two distinct ways. During the initial in-person survey and during each of the pre-election telephone rounds, we asked participants who they planned to vote for in the December presidential and parliamentary contests. We asked the question—"Who did you vote for?"—in the post-election telephone round. This gave us seven responses for each participant spanning six months. Most respondents were consistent in how they answered these questions across rounds: 77 percent of respondents did not waver in the presidential contest and 76 remained steadfast in the parliamentary contest. One way we differentiated core voters from those who swung is via the dichotomous variable *Vote Change*. This variable assigns a one if someone changed their vote choice even once. It assigns a zero if someone remained firm. The other way we differentiated voters is with a ratio-level description we call *Number of Vote Changes*. Of those who changed their votes, the modal category was those who changed only once. But the majority changed more than once and, in three cases for the presidency and two cases for the parliamentary race, individuals changed the candidate they preferred five times out of six opportunities. *Number of Vote Changes* records the instances of change for each respondent and ranges from zero times for core voters to five times for the most undecided.

A common alternative for operationalizing swing voters is asking respondents who they have supported in past elections and comparing this to whom they plan on voting for in the upcoming election. These are Key's (1966) "switchers." Given what we know about pro-incumbency biases in pre-election surveys, it is likely that many respondents identify themselves as supporting the incumbent despite having put their thumbprint beside another candidate on the ballot paper (Carlson, 2018). Our operationalization of swing voters is not immune to incumbency bias. It is likely our respondents face pressures not dissimilar to those faced by respondents

on other surveys, but because of the two ways we record swing voters, we can mitigate fears of this known bias. All of our pre-election surveys had the same incumbent so our variance in *Number of Vote Changes* is largely unrelated to an incumbency bias. Also, the Nabdam case's political history works to our advantage. Prior to the 2016 elections, Nabdam had an NDC president and an NPP parliamentarian. Nabdams voted to return their NDC president, although, nationally the NPP candidate won. Nabdams voted to oust their NPP parliamentarian in favor of the NDC candidate. Given that we are looking at the presidential and parliamentary races, and that we had one incumbent from both parties and one status quo reaffirmed, and the other toppled locally, consistent results across models mitigate incumbency bias concerns.

The other common approach to measuring persuadability asks a straight-forward question—"How confident are you in your choice?" or "Would you consider changing your mind?" The American National Election Study feeling thermometers approximate this approach (Bartels, 2016). For the five telephone survey rounds after the face-to-face interviews before the election, we asked voters how confident they were in their vote choice. Response options were "Very," "Somewhat," and "Not at all." We asked this question for both presidential and parliamentary choices. Five rounds, two races, and 100 respondents meant we had 1,000 opportunities for individuals in the survey to answer this question. Out of 1,000 opportunities, it was in only three cases that voters identified themselves as "somewhat" confident and once as "not at all." We also had two pieces of missing data. This means in 99.4 percent of our cases, individuals identified themselves as very confident in their vote choice. When we compare the quarter of voters who swung over the course of our survey to the three-quarters who stood firm, perceiving oneself as less certain was not a significant predictor of who was in the former group and who was in the latter. In other words, respondents at a single point in time were not very good at judging for themselves whether or not they were fixed in their position or persuadable even in the very near future.

"For all its popularity among reporters and practitioners," Mayer (2008, p. 1) lamented about the concept of the swing voter a decade ago, "the concept of the swing voter has been almost entirely ignored by academic analysts of voting and elections." His critique, which is only slightly less apt today, was not about the concept's lack of use, but rather its lack of standard operationalization criteria. There are alternatives to our operational definition (outlined above) that focus on different facets of the swing voter conceptual definition, but our operational definition has clear advantages in this context. Our measurement approach is conservative because it is difficult to imagine a scenario wherein someone who is firmly attached—not

merely perceiving themselves as firmly attached—to one political party would vary their purported vote preference to a survey enumerator. It would be far more likely for someone to feign confidence in their choice to avoid being perceived as a vacillator, or to identify consistently with what they believe is the safer and/or more lucrative choice despite experiencing secret internal indecision. In other words, swing voters identified in the survey are very likely persuadable voters under normal conditions, but voters we identify as core may be more persuadable than our instrument indicates. For the purposes of our conclusions, erring on the side of false negatives instead of false positives gives us great confidence that our conclusions are not a mirage. Our measurement is not so conservative, however, that it disguises all variance in a community where acknowledging indecision is rare and swing voting is likely to be happening. Our operational definition of a swing voter misses some key variants of the multi-faceted concept. We observed, for instance, a six-month period when the campaign was active and therefore miss longer term changes of mind. The fact, however, that we diminish the potential impact of incumbency bias and circumnavigate respondents' status quo bias is a huge benefit.

## Explanatory Variables

The independent variable for clientelism was operationalized by asking respondents whether or not they asked for, or received, a gift from a candidate or his campaign. Over the course of the survey, five participants answered these questions in the affirmative once. None admitted to asking for, or receiving, gifts multiple times. These five respondents were scored as one on the *Campaign Gift* variable. All others were scored as zero. We understand that gift giving at campaign time is not the only form of clientelism and that there is likely to be some social desirability effect lowering the total of respondents admitting to asking for or receiving a gift (Gonzalez-Ocantos, de Jonge, Meléndez, Osorio, & Nickerson, 2012; Hilgers, 2011; Karp & Brockington, 2005). Gift giving remains, however, a significant form of clientelism in contexts like Nabdam and evidence suggests poorer voters with less education are not as impacted by the social desirability effects concerning vote buying (Jensen & Justesen, 2014; Kramon, 2017; Vicente & Wantchekon, 2009).

For retrospective voting, we used the variable *Effectiveness*. This variable was operationalized at the face-to-face interview that began the panel study. For both the parliamentary race and the presidential race, we asked respondents to identify whom they believed would be the most effective in the position. Enumerators coded answers one of two ways:

the respondent identified the incumbent (1) or someone else (0). For the incumbent, this question draws on experience. Either they are perceived to be effective or they are not. To respond to this question with a non-incumbent requires hypothetical thinking. The incumbent has done so poorly, the thinking goes, that I am willing to take a chance on something different. This approach to operationalizing retrospective voting is not nearly as sophisticated as some (Healy & Malhotra, 2013), but it should rudimentarily let us know who thinks the incumbents have done well enough to earn a vote of confidence for effectiveness versus who thinks their performance has been substandard enough to speculate on a relatively unknown candidate doing better.

During the five telephone rounds of surveying before the election, respondents were asked if they attended a campaign event, followed the news of the campaign on radio/television/newspaper, or spoke with a friend/neighbor about the campaign. These questions are modeled after the political engagement questions from the British Elections Study (Norris, 2001, p. 172). Three questions across five rounds means fifteen opportunities to answer in the affirmative. *Campaign Activity* records the percentage of the time a respondent gave the affirmative response. This variable gives us a sense of the extent to which people are actively participating in the campaign to enable us to see if those who are more active are more likely to swing back and forth between candidates than those who are less active.

Demographic and socioeconomic variables included in the models were *Age*, *Male*, and *High School*. Participants were asked for the year of their birth. This year was subtracted from the year 2016 to give an approximate age. If the respondents did not know their birth year precisely, we operationalized the *Age* variable with the birth year identified on their voter's identification card. Using this method, we achieved a sample with a median age of 35 years. *Male* was coded as a one if participants identified as male and a zero if they identified as female. Since we stratified the sample by gender, it was half male and half female. *High School* was coded dichotomously as well. A one indicated that the respondent had completed secondary school (high school, senior secondary school, or A-level) whereas a zero indicated the respondent had not. Approximately, one in five Nabrug in our sample reported completing high school. Ethnicity, a variable that has received a great deal of attention by those studying Ghanaian electoral politics, does not appear in our model because it does not vary. Nabdam is very ethnically homogenous. Nearly every resident in the district identifies as a Nabt-speaker and the few who do not overwhelmingly hail from a neighboring community that speaks a

closely-related language.[7] Our sample was entirely comprised of people who understood themselves as Nabrug.

Issues were operationalized with an open-ended question—"In your opinion what is the most serious problem faced by Ghana today?" Answers provided by at least ten respondents included poor health care (11), crime (12), poor quality schools (13), lack of access to clean toilets (15), and lack of employment (32). If a respondent provided one of these answers, they received a score of one for *Health*, *Crime*, *Schools*, *Toilets*, or *Employment*, respectively. Everyone who did not identify this issue as the top one facing the country was scored as zero. The seventeen respondents who did not identify one of the aforementioned five issues were spread out across five categories that averaged just over three responses each.

Partisan identification was operationalized with two variables. Nabdam is an NDC-leaning constituency. Though constituents elected an NPP parliamentarian for the 2012–2016 term, all other Nabdam Members of Parliament have been from the NDC and the constituency has gone to the NDC flagbearer since Rawlings's election in 1992. Given the lopsided nature of the constituency, we operationalized partisan ID with the dichotomous *NDC Partisan* variable. A one means the respondent identified themselves as preferring the NDC and a zero means they identified themselves as preferring another party. Eighty-two respondents were coded as NDC supporters and 18 as non-NDC supporters.[8] We know from election results that the actual sentiment of Nabrug voters was about 20 points closer than these numbers would indicate. Given known tendencies for incumbent bias (Carlson, 2018), it would not be unreasonable to expect that some of these NDC identifiers were using the majority party identification publicly but intended to vote for a minority party. To get a sense of how strongly respondents' partisan attachment was, we asked directly—How close do you feel toward your party?—but responses were universally "very close." So, we asked instead

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7. The relationship between Nabdam and neighboring communities is linguistically complex and politically contested. Locally, terms like Frafra, Gurenɛ, or BONABOTO are used to situate Nabt into its environment; however, another observer might interject that this is not quite right or that one is preferred to the other. Kropp Dakubu (1988) classifies Nabt as a Central Oti-Volta language along with Kusaal to the east and Dagbani to the south but includes a few words of Nabt in her Gurenɛ dictionary—Gurenɛ being a Western Oti-Volta language centered around the city of Bolgatanga (Kropp Dakubu, Atintono, & Nsoh, 2007).

8. Of these non-NDC supporters, 17 identify as NPP supporters and 1 identifies with no party.

whether respondents had ever voted for the NDC, NPP, or another party or independent candidate. On a scale of zero to three (with zero meaning "the respondent had never voted for any of these three options before" and three indicating that "they had voted for all three before"), *Past Party Vote* serves as a proxy for one's loyalty to a party.

## Predicting Swing Voters in Presidential and Parliamentary Races

To test our six hypotheses, we fit several models analyzing both *Vote Change* and *Number of Vote Changes* for president and member of parliament.[9] The dependent variable for the *Vote Change* models is whether a respondent changed their vote choice (coded as one) or not (coded as zero) in the presidential or parliamentary elections, respectively. A binary logistic regression was used to evaluate *Vote Change* and is identifiable with an open circle. To test the robustness of our theory, we use a second dependent variable, where we count the number of times a respondent changes their vote choice for president or member of parliament. We employ a negative binomial regression to estimate the count or *Number of Vote Changes*, which is indicated with a closed circle.[10] The results of these analyses are graphically displayed in Figures 2 and 3 using coefficient plots.[11]

Two of our hypotheses (1 and 4) show null results across both versions of the dependent variable and across both the presidential and parliamentary race. Nabrug in our sample who received gifts from the campaigns are no more likely to swing from one candidate to the other than Nabrug who report receiving no gifts. In other words, gifts do not fix voters to one party or lure

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9. Long (1997, p. 54) notes that maximum likelihood estimators, including models fitting logit and negative binomial regressions, are not necessarily bad estimators in small samples, but suggests that it is risky to use maximum likelihood estimation with samples smaller than 100. Risks of estimating small samples are exacerbated when the independent variables are highly collinear or there is little variation in the dependent variable. Fortunately, our sample is not smaller than 100, the independent variables are not collinear (as confirmed by pairwise correlation tests), and our dependent variables do exhibit variation (e.g., the outcomes do not nearly all cluster at either 0 or 1) as evinced by their respective mean and standard errors.

10. The negative binomial regression model is preferred to the poisson regression model for count outcomes where there is significant evidence of overdispersion based on a likelihood-ratio test, which we observe.

11. Each variable is represented by a circle with horizontal bars indicating confidence intervals. Only those variables with horizontal bars that do not cross the vertical reference line are statistically significant.
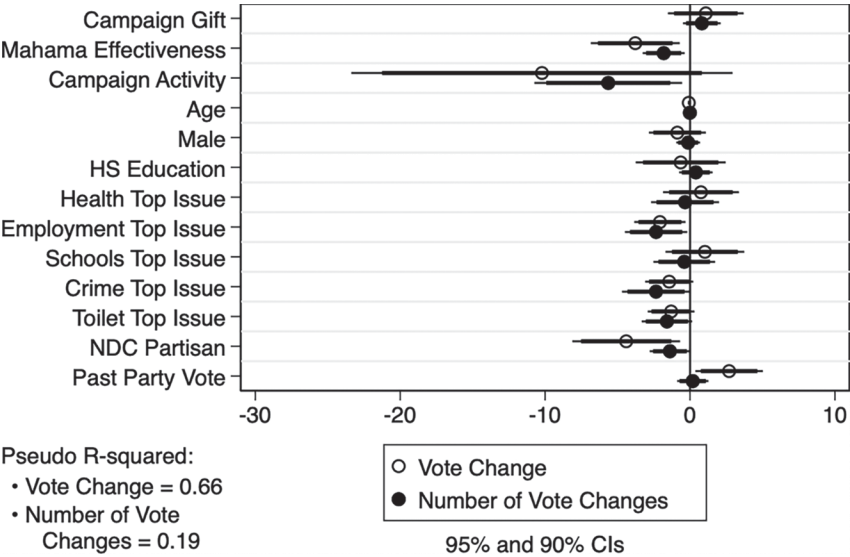
Figure 2. Models of Presidential Swing Voting (Logistic and Negative Binomial Regression).
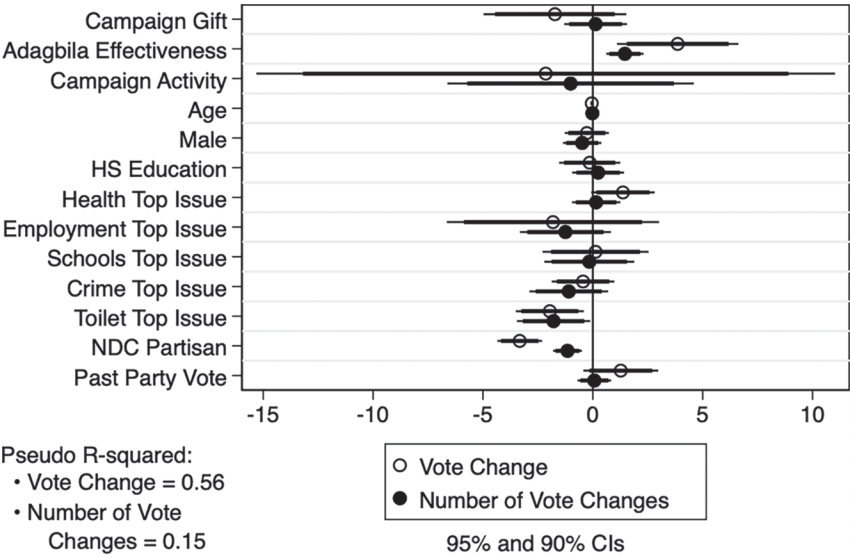


Figure 3. Models of Parliamentary Swing Voting (Logistic and Negative Binomial Regression).

them away. Even if we embrace the social desirability literature and assume that a significant percentage of respondents who report not receiving a gift actually did, there is little reason to believe the five individuals who reported receiving a gift are fabricating the truth. This finding does not weigh in on the argument about whether gift-giving is a useful campaign tool. Rather, it merely points out that whether or not someone reports receiving a gift is not a good predictor of how persuadable they are. Age, gender, and education have no impact on whether or not one is likely to be a swing voter over the course of a campaign. This means old and young, male and female, relatively educated and relatively uneducated are all similarly inclined to explore their electoral options and to tie themselves solidly to a candidate.

Two of our hypotheses (3 and 5) show mixed results across models and races. Following a campaign more closely seems to be unassociated with whether or not one is a swing voter. The one exception to this rule is in the presidential race when the number of times respondents changed their mind is observed as a dependent variable. Respondents who followed the campaign more closely were slightly less likely to change their mind on average compared to those who followed the campaign less closely. Given that this finding only occurs once across four opportunities, however, the safest reading is "no relationship." Potentially more interesting are the issues Hypothesis 5 raises. For the president, employment is consistently significant. For parliament, the consistent issue is toilets. In both cases, respondents who claim the particular issue as their top concern are significantly less likely to be a swing voter. These results are not enough to confidently assert that issue preferences drive voter decisions, but they do point to some interesting hypotheses. Perhaps if one candidate makes an issue their own, people who really care about that issue gravitate toward them. Conversely, it might be the case that when candidates make an issue area their own, it primes ardent supporters to also identify the issue as their top priority. In either case, a strong association between a single candidate and one or two issues could produce results like those encountered here.

Our consistently significant findings are associated with Hypotheses 2 and 6. These are the hypotheses that deal with retrospective voting and partisanship. The story the data tells is not, however, conventional. When it comes to retrospective voting, respondents who approved of the job President Mahama was doing were less likely to be swing voters than those who thought someone else would be more effective. For Boniface Adagbila, the NPP parliamentary incumbent, this relationship was reversed. Respondents who thought he was effective were more likely to swing. In both the presidential and parliamentary models, NDC partisans were less likely to be swing voters than NPP supporters. As expected, voters who cast past

votes for multiple parties were more likely to show indecision during the 2016 campaign.

By itself, the finding that Mahama fans behave as expected but Adagbila fans behave counter to expectations makes little sense. When combined with the significant relationship that NDC partisanship has with stable vote choice throughout the campaign, the picture becomes clearer. Nabdam is one of Ghana's smallest constituencies in terms of population and is ethnically homogenous. Historically, the constituency leans heavily, though not decisively, toward the NDC. In other words, NDC is the tight-knit community's default partisanship. Voters who decide to cast a ballot for the NPP or a third party know they are bucking community norms. It is not a stretch to expect this outlier status to cause anxiety and for this anxiety to manifest itself as indecision. Respondents who think Adagbila did well during his single term in parliament still waver. Voters who do not identify as NDC party members are less likely to be firmly committed to their party.

## Conclusions

Every Ghanaian constituency has its peculiarities. There are certainly important differences even between Nabdam and its neighbors, let alone constituencies further afield. It is one of Ghana's smallest constituencies in terms of population, is ethnically homogenous, completely rural, and has comparatively high levels of poverty. Most Ghanaian constituencies differ from Nabdam in one or more of these attributes. So, will what we have learned in Nabdam help us better understand what undecideds look like throughout Ghana? Our answers should certainly be embraced with caution. The library focusing on swing voters in Ghana is still relatively small and there is not yet a consensus on the primary driving factors of voter indecision. This study represents but one book in the library, albeit an important one. In all of the aforementioned studies focusing directly on explaining swing voters in Ghana, either aggregate data (Fridy, 2012), a single survey (Lindberg & Morrison, 2005; Weghorst & Lindberg, 2013), or cross-sectional surveys (Adams et al., 2018; Kim, 2018) are used. All of these approaches are good for giving researchers a snapshot of a particular point in time. Ours is the first to explore this phenomenon with a panel study, and swing voting is a topic that plays into the strengths of panel designs.

Our findings contribute substantially to this body of scholarly literature by indicating the importance of minority party sympathizers in explaining swing voter behavior. Twenty percent of our sample changed their position on who they were voting for at least once in both the parliamentary and presidential contests. Three in the case of the presidential race and four in

the case of the parliamentary race joined these twenty in being swing voters as we define them. In an NDC-leaning constituency, more than 95 percent of those who did not switch their vote choice identified themselves as NDC partisans. This figure contrasts starkly with swing voters, most of whom identify themselves as NPP partisans. Seventy percent of swing respondents in the presidential race and 58 percent in the parliamentary race identify as NPP. The story makes sense with a little knowledge of the constituency. NPP is not as well established in the region, and respondents' roots in the party are less likely to run deep. With time, perhaps, this will change. It is also a hopeful story for democracy in Ghana. Minority parties still have some work to do in building a core in opposition areas, but the large number of persuadable voters identified in our study suggests there is ground available for building this base. Given the national nature of Ghana's presidential races, the expectation is that parties will seek to build a national character and invest in constructing inroads even in opponent strongholds. Our data suggests these institutions are creating the expected incentives to do so.

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