

Working Paper No. 181

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Abstract

This paper asks whether a country's choice of electoral system affects the methods citizens use to try to hold their government accountable. A large body of literature suggests that electoral system type has an impact on voting behaviour, but little work has been done on its effects on other strategies for democratic accountability, such as contacting an elected representative and protesting. Using data from 36 African countries, we find that the type of electoral system has a significant relationship with these forms of participation. Citizens in proportional representation (PR) systems are significantly more likely to protest than those in majoritarian ones, while those in majoritarian systems are more likely to contact their elected representatives. We argue that this is because the connection between citizens and representatives in majoritarian systems is clearer, closer, and more responsive, making contact an effective strategy and providing an efficient "safety valve" when citizens want to hold their government to account. The lack of a similar connection in most PR systems, in contrast, leads citizens to turn to protest with greater regularity.

Acknowledgements

We are grateful to Robert H. Bates, Michael Bratton, Gwyneth McClendon, Robert Mattes, and attendees of workshops at Harvard University and the Centre for Social Science Research at the University of Cape Town for their invaluable comments on earlier versions of this paper.



Introduction

The ability of citizens to hold their government accountable for its actions is widely considered to be a cornerstone of democracy and is associated with a host of positive development indicators and policy choices (Bellamy & Palumbo, 2010; Collier, 2011; De Waal, 1997; Easterly, 2006; Goetz & Jenkins, 2005; Jelmin, 2012; Sen, 1981; Watts, 1991).¹ One of the most commonly discussed accountability mechanisms is voting, which allows citizens to sanction poorly performing elected representatives by removing them from office on a regular, predictable basis (Barro, 1973; Ferejohn, 1986; Fiorina, 1981; Key, 1966; Manin, 1997).²

In recent years, however, an increasing body of literature has emphasized the limitations of elections as a method of accountability and has begun to explore the importance of other vertical accountability mechanisms, such as contacting elected representatives and protesting (Ackerman, 2003; Jelmin, 2012; Joshi, 2008; Smulovitz & Peruzotti, 2000).³ Like elections, these other mechanisms provide a way for citizens to hold elected representatives directly to account. Unlike elections, they can be activated "on demand" and do not depend on a fixed calendar (Smulovitz & Peruzotti, 2000).

Given the increasing acceptance that citizens have multiple vertical accountability mechanisms available to them, it is important to understand what leads them to choose one method over another, and when they will choose to work within the political system vs. turning to more confrontational methods such as protest (Mattes & Mozaffar, 2018; Dalton, 2014). In this paper, we provide a partial answer to this question by focusing on two non-electoral forms of vertical accountability – contacting and protesting – and asking what effect a country's choice of electoral system has on the propensity of citizens to employ one or other of these methods.

The paper proceeds as follows: After a brief literature review, we set out the theoretical underpinnings of the potential mechanism at play. We then move on to test this mechanism against a series of competing explanations, and find that, in the African context at least, the type of electoral system does indeed have a significant relationship with both these forms of participation. Citizens in proportional representation (PR) systems are significantly more likely to protest than those in majoritarian ones, while those in majoritarian systems are more likely to contact their elected representatives. We argue that this is because the connection between citizens and representatives in majoritarian systems is clearer, closer, and more responsive, making contact an effective strategy and providing an efficient "safety valve"

¹ Following Fearon (1999), we define accountability here as follows: An elected representative (A) is accountable to a citizen (B) if it is understood that A is supposed to act on behalf of B, and if B is able – through formal institutional or informal rules – to sanction and reward A for his activities in this regard.

² Though see Fearon (1999) as a partial challenge to a pure sanctioning argument.

³ Vertical accountability mechanisms are those that, like elections, allow citizens to hold their government accountable by exerting direct pressure. This contrasts with horizontal accountability mechanisms, in which different elements and agencies within the state hold each other accountable, usually on the basis of pre-established constitutional or legal checks and balances.

when citizens want to hold their government to account. The lack of a similar connection in PR systems, in contrast, leads citizens to turn to protest with greater regularity.

Electoral systems and political behaviour

The idea that the type of electoral system has an impact on political behaviour has a long history in the literature (Norris, 2004).⁴ Giovanni Sartori (1968) famously described electoral systems as "the most specific manipulative instrument of politics" (p. 273), while the seminal contributions of Maurice Duverger (1954) and Douglas Rae (1971) on the topic continue to inspire research decades later (see, for example, Itzkovitch-Malka & Hazan, 2016; Lijphart, 1990; Sanders, 2015; Singer, 2013).

Along with degree of multipartyism, the strength of social cleavages, and the provision of constituency service, one of the most commonly studied forms of political behaviour in this regard is voter turnout. As early as 1930, Harold F. Gosnell (1930) argued that PR systems were associated with higher levels of turnout, and in the years since a large body of evidence has been amassed to support this finding, although the precise mechanism underpinning it remains disputed (Blais & Dobrzynska, 1998; Jackman, 1987; Jackman & Miller, 1995; Ladner & Milner, 1999; Liphart, 1997; Milner, 2009; Norris, 2003, 2004; Powell, 1986; Tingsten, 1937).

Electoral system type is not the only thing that affects voter turnout, of course. Other factors found to be important include cultural attitudes and values, the economic environment, country size, compulsory voting laws, number of parties, the competitiveness of the election, and the decisiveness of the election (Blais & Dobrzynska, 1998; Gray & Caul, 2000; Jackman & Miller, 1995; Norris, 2004; Verba, Nie, & Kim, 1978). Even accounting for all of these, however, the turnout boost from PR remains significant, estimated at somewhere between 3% and 12% (Blais & Dobrzynska, 1998; Lijphart, 1997).

Although there is broad agreement that the type of electoral system affects voter turnout, however, little work has been done looking at whether electoral system type also affects other vertical accountability mechanisms, including two forms of behaviour – contacting elected representatives and protesting – that are often considered alongside voting in the literature (see, for example, Bratton, Mattes, & Gyimah-Boadi, 2005; Curtice & Shively, 2000; Jelmin, 2012). There are good reasons to believe that it might, however, and this lack of attention therefore represents a significant gap in the literature.

The appeal of contacting in majoritarian systems

First, irrespective of the actual performance of the elected representative, there is evidence to suggest that majoritarian systems, in which representatives are clearly linked to geographic constituencies, simply make it *easier* for citizens to identify someone to contact.

Data from Round 4 (2008/2009) of the Afrobarometer public-attitude survey, for example, show that on average across 20 African countries, 58% of respondents in majoritarian systems are able to correctly identify their local legislative representative, compared to just 21% of respondents in PR systems (Figure 1).⁵ This ease of identification reduces the cost of contacting for citizens, and is likely to increase its appeal as a method of democratic accountability.

⁴ Electoral systems are the set of rules that lay out how votes will be aggregated in a democracy to determine who will hold office. Although there are a number of different electoral systems, scholars generally categorize them into three main families: plurality or majoritarian systems, proportional representation (PR) systems, and mixed systems. Majoritarian systems usually depend on single-member constituencies and award the seat to the candidate with the most votes. In PR systems, multi-member districts are the norm, and the distribution of seats reflects the percentage of votes cast. Finally, mixed systems employ some combination of both the PR and majoritarian approaches. (See Norris (2004) for a more comprehensive description of these different electoral systems and their subtypes.)

⁵ This question has not been repeated in more recent rounds of the Afrobarometer survey.



Figure 1: Percentage of people who could correctly identify their legislative representative | 20 African countries | 2008/2009

Second, in addition to making it easier for citizens to identify someone to contact, majoritarian systems encourage elected representatives to prioritize constituency work, and this, in turn, makes contacting a more appealing option (Norris, 1997; Pilet, Freire, & Costa, 2012). The logic here is that politicians desire re-election and act between elections to maximize their chances of this. Because representatives in majoritarian systems depend primarily on their constituents for re-election, they have a strong incentive to act in the interest of these voters and to be responsive to their needs and desires between, as well as during, elections (Persson & Tabellini, 2002). Those elected in PR systems, in contrast, often depend much more for re-election on the decisions of party leadership, and are therefore more likely to cater to the interests of this leadership than their own constituents (Raffler, 2012).⁶ In practical terms, this means that legislators in majoritarian systems are likely to travel to their constituencies more frequently (reducing the cost of contacting them for citizens), and they are also more likely to be responsive to citizen demands, making contacting them a more effective, as well as an easier, choice (Gabriel, Bollow, Dageförde, & Rabuza, 2011).

Preliminary evidence from the African Legislatures Project provides some support for this argument in the African context, finding that elected officials from single-member majoritarian districts are more likely to prioritize constituency work while their colleagues in PR systems spend substantially more time in the capital working on tasks within the legislature and central party structures (Barkan, Mattes, Mozaffar, & Smiddy, 2010).

The appeal of protesting in PR systems

The above mechanisms help to explain why we are likely to see more contacting in majoritarian than in PR systems. Because political representatives in PR systems are less visible, are often not responsible for a territorial constituency, and have lower incentives to engage in constituency service, the relationship between elected representatives and citizens in these systems tends to be more distant and impersonal (Anduiza, Gallego, & Cantijoch, 2010; Ashworth & de Mesquita, 2006; Cain, Ferejohn, & Fiorina, 1987; Carey & Shugart, 1995; Norris,

Source: Afrobarometer Round 4 (2008/2009)

⁶See Norris (2004) for more on the role of party leadership in the various PR subtypes.

2004; Scholl, 1986). This is likely to make contacting representatives more difficult and costly for citizens, removing an important "safety valve" and leading citizens to look for other methods of accountability. Building on the work of Booysen (2007); Dalton (2014); Kriesi, Koopmans, Duyvendak, and Guigni (1995); Kronenwetter (1996); Meyer (2007) and others, we argue that protest acts as an alternate tool of democratic accountability in these situations, used strategically when citizens feel it will work and other options are perceived to be more costly or inefficient. The comparatively higher cost of contacting in PR systems, therefore, is likely to lead to higher levels of protest as dissatisfied citizens turn to more disruptive tactics to try to make their voices heard. Figure 2 below provides a summary of our argument.





Estimation strategy

To assess the relationship between electoral system type and the decisions of citizens about how best to hold their representatives accountable between elections, we began by classifying the various electoral systems across the 36 African countries included in Round 6 (2014/2015) of the Afrobarometer survey. The classification of electoral systems is the subject of a considerable literature in political science,⁷ but as shown in Table 1, we follow the threefold distinction used by the Varieties of Democracy project, which classifies 18 of the countries in Round 6 as having a majoritarian system, 12 as PR, and six as mixed (Coppedge et al., 2017).

⁷ See, for example, Blais & Dobrzynska (1998); Bowler (1996); Bowler & Farrell (1993); Carey & Shugart (1995); Farrell (2011); Lijphart (1999).

Majoritarian	Mixed	PR
Botswana	Cameroon	Algeria
Côte d'Ivoire	Guinea	Benin
Egypt	Lesotho	Burkina Faso
Gabon	Niger	Burundi
Ghana	Senegal	Cape Verde
Kenya	Sudan	Morocco
Liberia		Mozambique
Madagascar		Namibia
Malawi		São Tomé & Príncipe
Mali		South Africa
Mauritius		Togo
Nigeria		Tunisia
Sierra Leone		
Swaziland		
Tanzania		
Uganda		
Zambia		
Zimbabwe		

Table 1: Countries by electoral system type | Afrobarometer Round 6 (2014/2015)

Source: Varieties of Democracy Project

We dropped two countries from the sample: Egypt because a number of important questions were not asked there and Swaziland because it is an absolute monarchy where the extensive formal powers granted to the king mean we would not expect the official electoral system type (majoritarian) to have a strong impact on citizen behaviour.⁸ For the main analysis, we further subset the data to remove countries with mixed systems. These steps reduced the number of countries in the data set from 36 to 28 (44,355 observations) but enabled us to focus more clearly on the differences between majoritarian and PR systems. We then ran a series of multinomial logistic and ordinary least squared regressions with the variables operationalized as detailed below and in Appendix A and country weights included in order to standardize national samples as if they were equal in size.

The dependent variable

To measure whether citizens reported contacting a member of the legislature, we used the following question: "During the past year, how often have you contacted a member of Parliament about some important problem or to give them your views?" We recoded the answers into a binary variable, giving respondents a score of 1 if they reported contacting an elected official at least once over the previous 12 months and 0 if they reported no contact.⁹

To examine protest participation, we used this question: "Here is a list of actions that people sometimes take as citizens when they are dissatisfied with government performance. Please tell me whether you, personally, have participated in a demonstration or protest march during the past year." Again we dichotomized the answers such that a score of 1 indicates a respondent had protested at least once over the previous 12 months while a score of 0 reflects no reported protest participation.

⁸ Re-running the regressions with the dropped countries included did not substantially alter any of the main findings (see Appendix D).

⁹ The combination of the large number of variables used in our analysis, the fact that some questions were not asked in all countries, and the varying proportions of "don't know" responses required close attention to the problem of missing data in our data set. For more information on how we dealt with this, see Appendix B.

Across the 34-country sample, 5,765 respondents (11%) reported that they had contacted a member of Parliament at least once, while 4,763 respondents (9%) reported having protested. These numbers are roughly similar to previous rounds of Afrobarometer.¹⁰

Comparing the basic frequencies of contacting (Figure 3) and protesting (Figure 4) in the different electoral systems provides some preliminary support for our main hypothesis.



Figure 3: Contact by electoral system type | 34 African countries | 2014/2015

Source: Afrobarometer Round 6 (2014/2015)

¹⁰ For a more detailed breakdown of respondents' reported protest and contact rates across rounds and by electoral system, see Appendix C.





Source: Afrobarometer Round 6 (2014/2015)

Citizens who live in countries that use majoritarian systems to elect their national representatives are more likely to contact members of the legislature (14% compared to 8% in PR systems). At the same time, respondents who select their representatives based on a PR system are, on average, 4 percentage points more likely to protest than their majoritarian counterparts (12% compared to 8%).

To create our primary dependent variable, we combined these data on protest and contact to create a new four-level variable (form of democratic accountability) in which each respondent is categorized as having contacted, protested, engaged in both activities, or engaged in neither. This variable was re-leveled so the reference category was "neither."

Alternative mechanisms

Our main argument builds on a large body of literature that supports the idea that majoritarian and PR systems are inherently different, with the potential to affect political participation in different ways (Lijphart, 1994; Powell & Whitten, 1993; Strøm, 2000). As is the case with the relationship between electoral system type and voting behaviour, it is likely that a number of other variables also affect the decision of citizens to contact members of the legislature or turn to protest. Our argument, therefore, is not that electoral system type is the only important factor, but rather that it is an important factor that has, up to now, been overlooked. We controlled in our regression analysis for a number of other potential mechanisms, as outlined below. Full details of all variables, including question wording and a description of all constructs and indices, can be found in Appendix A.

Political participation

Citizens engage in politics in a variety of ways and in multiple different arenas. Some might join a political party and attend regular branch meetings, while others might be members of civil society or religious organizations that engage in non-partisan political activities.

There is good evidence to suggest that participation in one forum directly reduces the costs and increases the benefits of participating in other types of political activity. This may be by, for example, disseminating information about other events, providing transport to such events, or providing overt social approval for political engagement (Dalton, 2014; Krishna, 2011; Putnam, 1993).

In addition, there is some evidence to suggest that political participation may be "habit forming," and it is therefore possible that a citizen's general level of political participation could have some effect on the specific forms of behaviour we are interested in here (Cutts, Fieldhouse, & John, 2009; Dinas, 2012; Franklin, 2004; Gerber, Green, & Shachar, 2003; Green & Shachar, 2000).

To account for the likely effect of other types of political and civil society participation on a citizen's decision to engage in protest and contacting behaviour, we controlled for level of partisanship, level of social capital, whether the respondent voted in the last election, and whether the respondent reports having contacted a religious or traditional leader over the past 12 months.

Performance evaluation

Based on the democratic accountability literature, it seems highly likely that citizens' decisions to engage in either contact or protest will also have something to do with their overall level of satisfaction with government activity (Powell & Whitten, 1993; Wang, 2013). If citizens believe that their representatives are delivering what they desire, they are less likely to feel a need to hold them accountable between election cycles, and thus less likely to engage in either contacting or protesting behaviour. This is not to say that grievances are a *sufficient* factor for accountability behaviour to occur, just that the existence of some sort of dissatisfaction is likely to be a necessary pre-condition for the forms of participation we are looking at here.¹¹

To account for the likelihood that performance evaluation affects the propensity of citizens to engage in our chosen methods of democratic accountability, we controlled for a respondent's level of belief that elected representatives listen and his or her overall satisfaction with the performance of government.

¹¹ See Flacks (2004); Goodwin (2012); Jenkins (1983); Klandermans, Roefs, & Olivier (1997); Lee & Chan (2011), and Oberschall (1978) for more detailed discussions of the limitations of grievance-based theories in explaining participation.

Cognitive awareness

In addition to participation in other forms of political activity and performance evaluation, it is well established in the literature that an individual's interest in, and ability to follow, current affairs affects his or her level of political participation (Brady, Verba, & Schlozman, 1995; Franklin, 1996; Rosenstone & Hansen, 1993; Verba, Schlozman, & Brady, 1995; Wolfinger & Rosenstone, 1980). In line with this, we control for respondents' level of cognitive engagement and education level.

Finally, we also included a battery of control variables. Following standard arguments in the literature, we controlled for age, gender, urban-rural residency location, and level of lived poverty (Brady et al., 1995; Bratton et al., 2005; Coffe & Bolzendahl, 2011; Dalton, 2014; Franklin, 1996; Hillygus, 2005; Rosenstone & Hansen, 1993; Verba et al., 1995; Wolfinger & Rosenstone, 1980).

We also ran robustness checks including a number of macro-level and other contextual factors that may impact political participation more generally or may have played a role in a country's choice of electoral system in the first place. These include the level of ethnic diversity in the country (calculated from the Afrobarometer data using the Herfindahl concentration formula),¹² the country of colonization, a country's wealth (GDP per capita [logged]), whether the respondent thought the most recent elections were free and fair, and the number of consecutive elections the country has seen. Additionally we included a control for the proximity of the survey to elections in each country in our robustness checks, as this may affect both the responsiveness of legislators to citizen demands and general participation levels in the country (Ahuja, 1994; Booysen, 2011; Shapiro, Brady, Brody, & Ferejohn, 1990).

Finally, the literature on politics in Africa has long identified patronage as a key factor in understanding citizens' political participation in general, and voting behaviour in particular (Lindberg & Morrison, 2008). We therefore included a binary patronage index in our main regression, indicating whether or not respondents report that the last time they contacted a leader they went alone *and* about a personal problem. Although this is not a perfect measure, it does allow us to control for the most likely patronage-related visits, and increases our confidence that our findings reflect non-clientelistic attempts at democratic accountability.

Results and discussion

Our primary regression analysis (Table 2) provides strong support for our main hypothesis. Citizens in PR systems appear to be significantly less likely than their majoritarian counterparts to contact their elected representatives, and significantly more likely to protest. These results are significant at the p<0.01 level, and the effects are among the largest in the model. Additionally, a likelihood ratio test shows that adding in electoral system type significantly improves the fit of the model ($X^2 = 491.03$, $p = < 2.2e^{-16}$).

In addition to electoral system type, a number of other variables appear to be important. Our political participation, performance evaluation, and cognitive engagement variables are all significant, as are the demographic and other controls.

Along with electoral system type, three other variables also seem to have effects that vary in direction depending on the form of accountability behaviour. On the demographic side, age works in this way, with contacters, on average, older than their non-contacting counterparts, and protesters younger. The effect of voting, similarly, varies in direction for contact and protest. Those who report having contacted elected representatives over the previous 12 months are marginally *more* likely than non-contacters to have voted in the last election, although the effect is not significant. For protesters, however, the effect is strongly

¹² The Herfindahl concentration formula is: $ELF = 1 - \sum_{i=1}^{n} s_i^2$ where s_i is the share of group i (i = 1, ..., n).

negative and significant, suggesting that protesters are less engaged in other institutionalized forms of democratic accountability.

			Model A1	
	Variable	Both	Contact	Protest
		Coeff	Coeff	Coeff
		(s.e.)	(s.e.)	(s.e.)
	Constant	-7.193***	-4.571***	-3.879***
		(.233)	(.118)	(.122)
Electoral		.325***	672***	.789***
system	[Majoritarian]	(.088)	(.054)	(.054)
	Partisanship	.658***	.351***	.249***
		(.112)	(.054)	(.054)
	Social capital	.331***	.257***	.250***
Political		(.039)	(.022)	(.026)
participation	Voted in last election	340***	.003	285***
		(.100)	(.057)	(.055)
	Contacting influential person	1.357***	1.019***	.277***
	. .	(.059)	(.029)	(.033)
	Representatives listen	.613***	.496***	.118***
Performance	-	(.046)	(.025)	(.031)
evaluation	Government performance	102***	.052**	072***
		(.045)	(.024)	(.027)
	Cognitive engagement	.267***	.171***	.210***
Cognitive		(.027)	(.014)	(.015)
engagement	Education	.423***	.154***	.278***
		(.050)	(.026)	(.029)
	Age	143**	.174***	211***
		(.067)	(.035)	(.039)
	Gender (1=male)	.337***	.276***	.232***
		(.087)	(.046)	(.050)
Additional	Location (1=urban)	.456***	.108***	.355***
control variables		(.089)	(.049)	(.053)
	Poverty	.245***	.091***	.169***
		(.045)	(.025)	(.027)
	Patronage	940***	605***	083
		(.117)	(.057)	(.062)
	Observations	34039	· · ·	-
	McFadden's pseudo R ²	0.32		

Table 2: Multinomial logistic regression, full models

Note: *p<.1; **p<.05; ***p<.01. The dependent variable in this analysis is "form of democratic accountability." The reference category is "neither contacting nor protesting."

Relatedly, protesters are also significantly less likely than contacters to be happy with the performance of government. The fact that protesters report high levels of dissatisfaction with government performance is perhaps not that surprising, given that our theory rests on protest being activated when citizens have a grievance. More interesting is the fact that contacters are actually more likely to indicate that they are satisfied with government performance than those who report having neither protested nor contacted (significant at the 0.01 level). This may seem odd given that accountability mechanisms are usually theorized to be mobilized when citizens are unhappy with government performance, but there are a

number of possible explanations for this. First, it may be that the questions asked by Afrobarometer around the provision of services do not capture important aspects of government performance, and citizens who contact are therefore relatively satisfied with the provision of the services listed, but unhappy with some other element of government activity. Second, a respondent might be satisfied with government service provision overall, but very dissatisfied with a particular service (e.g. health care), leading him or her to exercise a form of democratic accountability to address the grievance. Because we created an aggregate index with 11 items, we might not necessarily pick up on this in our analysis. Finally, it could be that those who contact are more satisfied on average because they believe they have actually had a hand in shaping service provision and it is therefore more in line with their preferences. In other words, satisfaction with government may represent more than just the outcome; it may involve the process as well.

One final possibility is that contacters might be, on average, more satisfied with government performance because they are more likely to be heavily embedded in clientelist networks and to contact their elected representatives for clientelist reasons (Manzetti & Wilson, 2007). While we cannot completely discount this argument, the strength and direction of our patronage index supports our claim that contact is functioning as a form of democratic accountability here, rather than simply reflecting patronage claims. While significant, the index operates in a strongly negative direction. That is, individuals who indicate that the last time they contacted a leader in the community they did it alone and for a personal problem are significantly *less* likely to report either protesting or contacting an elected representative over the past 12 months than those who went in a group and/or regarding a community problem.

In summary, and as expected, our initial regression results show that respondents in majoritarian systems do seem to be more likely to contact their elected representatives, and less likely to protest, than their counterparts in PR systems. And this model is robust to the substitution of variables, to the inclusion of a number of additional variables, and to sequentially dropping each country (see Appendix D for more details).

The question of the mechanism remains, however. We suggest that citizens are more likely to contact in majoritarian systems because the connection between citizens and representatives is clearer, closer, and more responsive, making contact an effective strategy and providing an efficient "safety valve" when citizens are dissatisfied. Although a full investigation of the mechanism is beyond the scope of this paper, and is complicated by the fact that electoral systems are endogenously determined (see Boix, 1999), subsetting the data and running OLS regressions on majoritarian and PR systems separately provides some tentative support for our argument.¹³

As Table 3 shows, when we look at the case of contact, citizens who contact representatives in majoritarian systems are more likely than their counterparts in PR systems to report being satisfied with the services provided by the government and to feel that representatives listen to them. This makes sense in our theory, as our mechanism suggests representatives in majoritarian systems have more incentives to make themselves available to citizens and to respond to their needs.

Similarly, although contacting an influential person remains an important predictor for citizens in both systems, its substantive effect is higher in majoritarian countries. Again there is a clear logic to this, consistent with our hypothesis. In majoritarian systems, where it is relatively easy for citizens to identify the right person to speak with, the experience of contacting other influential leaders is likely to contribute to a general habit of political participation, and a mutually reinforcing feedback loop develops. In PR systems, in contrast, contacting a local traditional or religious leader is likely to have a weaker relationship with contacting a

¹³ We turn to OLS regressions here because of the difficulty of comparing logit coefficients across groups in any meaningful way (see Allison, 1999; Karlson, Holm, & Breen, 2012; Long, 2009; Williams, 2009, 2010). Our dependent variables here are the simple binary variables "*protest*" and "*contact*" discussed earlier.

legislator because of the specific challenge of identifying and accessing an elected representative in a PR system – a challenge that would not exist for local traditional and religious leaders.

Finally, the fact that the protest models (Table 4) are a little less easy to interpret in this split analysis, and indeed are weaker overall, also makes some sense under our hypothesis. This is because our mechanism suggests that protest is used as an alternative when contacting is more difficult, rather than being selected as a generally preferred method.

		Mode	13	Mode	el 4
		Conta	Contact C		act
	Variable	(Majorita	arian)	(PR))
		Coeff	Beta	Coeff	Beta
		(s.e.)		(s.e.)	
	Constant	116***		036***	
		(.011)		(.011)	
	Partisanship	.033***	.045	.020***	.044
		(.005)		(.005)	
	Social capital	.034***	.097	.024***	.087
Political		(.002)		(.003)	
participation	Voted in last election	.0001	.000	011**	023
		(.005)		(.005)	
	Contacting influential	.124***	.306	.100***	.340
	person	(.003)		(.003)	
	Representatives listen	.067***	.155	.028***	.104
Performance		(.003)		(.003)	
evaluation	Government performance	.008***	.025	005	027
		(.002)		(.003)	
	Cognitive engagement	.015***	.078	.012***	.088
Cognitive		(.001)		(.001)	
engagement	Education	.016**	.042	.013***	.057
		(.003)		(.003)	
	Age	.013***	.026	.015***	.044
		(.004)		(.004)	
	Gender (1=male)	.028***	.041	.013**	.028
Additional		(.005)		(.005)	
Additional	Location (1=urban)	.011**	.015	.012**	.026
variables		(.005)		(.005)	
valiables	Poverty	.013***	.033	.004	.017
		(.003)		(.003)	
	Patronage	104***	122	076***	128
		(.006)		(.006)	
	Observations	22 03	81	12 01	19
	Adjusted R ²	.167	7	.133	3

Table 3: Contact: OLS regression, split by electoral system

Note: *p<.1; **p<.05; ***p<.01

		Model	5	Mod	el 6
		Protes	Prot	est	
	Variable	(Majorita	irian)	(PF	()
		Coeff (s.e.)	Beta	Coeff (s.e.)	Beta
	Constant	008		001***	
		(.009)		(.009)	
	Partisanship	.015***	.027	.032***	.054
		(.004)		(.006)	
	Social capital	.016***	.060	.036***	.102
Political		(.002)		(.004)	
participation	Voted in last election	033***	058	004	006
		(.004)		(.007)	
	Contacting influential	.028***	.092	.044***	.117
	person	(.002)		(.004)	
	Representatives listen	.011***	.035	.018***	.053
Performance		(.002)		(.004)	
evaluation	Government performance	.001	.002	021***	080
		(.002)		(.003)	
	Cognitive engagement	.012***	.082	.020***	.110
Cognitive		(.001)		(.002)	
engagement	Education	.017***	.066	.026***	.094
		(.002)		(.003)	
	Age	020***	050	013***	029
		(.003)		(.005)	
	Gender (1=male)	.015***	.029	.019***	.032
۸ ما ما نه : م به م ا		(.004)		(.006)	
Additional	Location (1=urban)	.031***	.060	.023***	.038
control		(.004)		(.006)	
variables	Poverty	.022***	.075	.002	.006
		(.002)		(.003)	
	Patronage	014***	032	025***	032
	-	(.005)		(.008)	
	Observations	22 025		12 0	17
	Adjusted R ²	.045		.06	3

Table 4: Protest: OLS regression, split by electoral system

Note: *p<.1; **p<.05; ***p<.01

Whether or not citizens report having voted in the last elections, as in the multinomial regression, again has a negative relationship with protest, but crucially this is significant only in majoritarian systems, not in PR systems. One reason for this, consistent with our theory, might be that in majoritarian systems the presence of an efficient safety valve makes protest more likely to be chosen by those who feel isolated from the formal system more generally and don't use either electoral or inter-election formal accountability mechanisms. In PR systems, in contrast, because contacting is more costly and less efficient, citizens are more likely to use protest alongside electoral accountability, resulting in a weaker relationship between voting and protest behaviour.

Similarly, the fact that citizens who protest in PR regimes are significantly less likely to be satisfied with government performance than their counterparts in majoritarian systems may also speak to this differential presence of alternative, efficient accountability mechanisms in the two systems. Ultimately, though, far more research is needed to really unpick this, and these results should be considered suggestive at best.

Conclusion

In this paper, we have explored the relationship between electoral system type and the methods citizens use to try to hold their government accountable between elections. With a particular focus on contacting and protesting – two forms of vertical accountability often considered alongside voting in the literature – we have found that the type of electoral system does indeed seem to have a significant relationship with these two behaviours. Citizens in majoritarian systems are significantly more likely to contact their elected representatives than those in PR systems, while citizens in PR systems turn to protest with greater regularity than their majoritarian counterparts. These findings are both significant and robust, and extend the literature on institutional design and democratic accountability in new ways.

Regarding the mechanism underpinning this, we have argued that the key difference between majoritarian and PR systems is that citizens in majoritarian systems find it easier and more rewarding to contact their elected representatives, and that this explains the differences in both protest and contact. To really disentangle the mechanisms at work here, however, further research is needed. The relationship between electoral system type and choice of accountability mechanism in mixed systems may provide an interesting point of entry in this regard. It may also be informative to study countries such as Côte d'Ivoire and Benin that have different systems at the national and subnational levels.

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Appendices

Appendix A: Variables in the analysis

	Variable type	Item wording	Missing data (%)	Source
DEPENDENT VARIABLES				
Contact	ltem	During the past year, how often have you contacted any of the following persons about some important problem or to give them your views: A member of Parliament? (Q24B)	<1	AB
Protest	ltem	Here is a list of actions that people sometimes take as citizens when they are dissatisfied with government performance. For each of these, please tell me whether you, personally, have done any of these things during the past year. If not, would you do this if you had the chance: Participated in a demonstration or protest march? (Q27E)	<1	AB
Form of democratic accountability	Multi-level variable	Combines contact and protest to create a four- level variable in which respondents are categorized as having protested, contacted, done both, or done neither. Reference category here is "neither."	< 1	AB
INDEPENDENT VARIABL	ES			
Electoral system				
Electoral system type	ltem	What was the electoral system used in this election for the lower or unicameral chamber of the legislature?	-	V-Dem
Political participation				
Partisanship	Item	Do you feel close to any particular political party? (Q90A)	8	AB
Social capital	Construct	Let's turn to your role in the community. Now I am going to read out a list of groups that people join or attend. For each one, could you tell me whether you are an official leader, an active member, an inactive member, or not a member: 1) A religious group that meets outside of regular worship services?; 2) Some other voluntary association or community group? (Q19A and B) The two items are correlated (Pearson's r) at .327. Reliability (Cronbach's alpha) = .493.	<1	AB

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Voting	ltem	Understanding that some people were unable to vote in the most recent national election in [20xx], which of the following statements is true for you: Voted in the last national election? (Q21)	10	АВ
Contacting influential person	Construct	During the past year, how often have you contacted any of the following persons about some important problem or to give them your views: 1) Traditional leader? 2) Religious leader? (Q24E and F) For the detailed version, the two items are correlated (Pearson's r) at .525. Reliability (Cronbach's alpha) = .685. For the binary version, the two items are correlated (Pearson's r) at .509. Reliability (Cronbach's alpha) = .674.	9	AB
Performance evaluation				
Representatives listen	ltem	How much of the time do you think the following try their best to listen to what people like you have to say: Members of Parliament? (Q59A)	<1	AB
Government performance	Index	Single unrotated factor (Eigenvalue = 5.52) explains 50.14% of common variance. Reliability (Cronbach's alpha) = .90.	3	AB
		Now let's speak about the present government of this country. How well or badly would you say the current government is handling the following matters, or haven't you heard enough to say: 1) Managing the economy? 2) Improving the living standards of the poor? 3) Creating jobs? 4) Keeping prices down? 5) Narrowing gaps between rich and poor? 6) Reducing crime? 7) Improving basic health services? 8) Addressing educational needs? 9) Ensuring enough to eat? 10) Fighting corruption? 11) Maintaining roads and bridges? (Q66 A,B,C,D,E,F,G,H,J,K, and L)		
Cognitive awareness				
Cognitive engagement	Construct	How interested would you say you are in public affairs? (Q13) When you get together with your friends or family, would you say you discuss political matters: 1) Never? 2) Occasionally? 3) Frequently? (Q14) The two items are correlated (Pearson's r) at .540. Reliability (Cronbach's alpha) = .7.	1	AB
Education	Item	What is your highest level of education? (Q97)	<1	AB

Additional control var	iables			
Age	Item	How old are you? (Q1)	<1	AB
Gender	ltem	Respondent's gender (Q101)	-	AB
Location	ltem	Urban or rural primary sampling unit (URBRUR)	-	АВ
Lived poverty	Index	Single unrotated factor (Eigenvalue = 2.76) explains 55.27% of common variance. Reliability (Cronbach's alpha) = .795. Over the past year, how often, if ever, have you or anyone in your family: 1) Gone without enough food to eat? 2) Gone without enough clean water for home use? 3) Gone without medical care? 4) Gone without enough fuel to cook your food? 5) Gone without a cash income? (Q8A-E)	1	AB
Patronage	Construct	Thinking of the last time you contacted any of these leaders. Did you go: 1) Alone or with a group? 2) To discuss a community problem or a personal problem? (Q25A and B). The two items are correlated (Pearson's r) at .754. Reliability (Cronbach's alpha) = .860.	1	AB
Additional variables Ir	ncluded in robu	istness checks		
District magnitude	ltem	Average district magnitude in 2005. The weighted average of the number of representatives elected by each constituency size, if available. If not, we use the number of seats divided by the number of constituencies (if both are known).	-	Quality of Government Institute Standard data set (2016) ¹⁴ ; CLEA (2017) ¹⁵ ; authors'
Corrupt parliamentarians	ltem	How many of the following people do you think are involved in corruption, or haven't you heard enough about them to say: Members of Parliament? (Q53B)	<1	AB
Trust in legislature	ltem	How much do you trust each of the following, or haven't you heard enough about them to say: Parliament? (Q52B)	4	AB
News from mass media	Index	Single unrotated factor (Eigenvalue = 1.66) explains 55.48% of common variance. Reliability (Cronbach's alpha) = .586.	<1	AB

¹⁴ See Teorell (2016).

¹⁵ See Kollman, Hicken, Caramani, Backer, & Lublin (2017).

		How often do you get news from the following		
		1) Radio? 2) Television? 3) Newspaper? (Q12A-C)		
Ethnic diversity	ltem	Herfindahl index calculated using the standard Herfindahl concentration formula (ELF = $1 - \sum_{i=1}^{n} s_i^2$ where s_i is the share of group i (i =		АВ
		1,, n)) from Q2: Which language is your home language?		
Free and fair elections	ltem	On the whole, how would you rate the freeness and fairness of the last national election, held in [20xx]? (Q22)	<1	AB
Consecutive elections	ltem	How many consecutive lower chamber or unicameral legislative elections (including the current election) have been held since 1900?	-	V-Dem
Colonial legacy	Item	Three dummy variables taking the value of 1 if country was colonized by France, Portugal, or Other. Reference category is Britain.	-	CIA World Factbook (2018) ¹⁶ and authors' research
National wealth	Item	GDP per capita, PPP, constant 2011 international \$, 5-year average prior to fieldwork in country (In)	-	World Bank (2015)
Timing of survey	Item	Smallest difference (months) between election and fieldwork	-	AB

¹⁶ See Central Intelligence Agency (2018).

Appendix B: "Don't know" responses

The combination of the large number of variables used, the fact that some questions were not asked in all countries, and the varying proportions of "don't know" responses required close attention to the problem of missing data in our data set.

The standard approach in statistical analysis is to set all "don't know" responses as "missing," which effectively drops them from the analysis. There are two problems with this approach, however. First, it reduces the number of effective cases on which the analysis is based, and as a result limits our confidence in the results. A second problem is that "don't know" is often a legitimate answer, and where possible it would be preferable to take it into account, rather than simply discarding it (King, Honaker, Joseph, & Scheve, 2000). Following the approach used by Mattes and Bratton (2007), therefore, we recode "don't know" responses to theoretically defensible places on the response scale where possible.

For example, for questions about political participation (voting, protesting, contacting, and so on), we assumed that those who did not know whether they had taken the specified course of action had in fact not done so. In other cases where response scales were symmetric and included a neutral middle category, we recoded "don't know" to this neutral category. Where a neutral category did not exist but was theoretically defensible, we created one. In these cases, "don't know" is assumed to reflect some point of "zero affect." We recoded "don't know" to "missing" only when we could see no theoretically defensible alternative.

Appendix C: Contact and protest rates over time

To allow for meaningful comparison over time Figure C.1 and Figure C.2 below include only the 16 countries that have been surveyed in all Afrobarometer rounds since 2002. These are: Botswana, Cape Verde, Ghana, Kenya, Lesotho, Malawi, Mali, Mozambique, Namibia, Nigeria, Senegal, South Africa, Tanzania, Uganda, Zambia, and Zimbabwe.



Figure C.1: Contact over time | 16 African countries | 2002-2015

Figure C.2: Protest over time | 16 African countries | 2002-2015



Source: Afrobarometer rounds 2-6 (2002-2015)

Source: Afrobarometer rounds 2-6 (2002-2015)

Appendix D: Robustness checks

To increase confidence in our results, we conducted a number of robustness checks. We used our 14-variable baseline model (Table 2) and changed the specifications as indicated below. In all of these, our main results hold and remain significant.

Table	D 1.	Robustness	checks
IUDIE	D .I.	KODOSIIIESS	CHECKS

Type of statistical analysis	Dependent variable(s)	Number of countries	Variable change
Multinomial logit	Form of democratic accountability	34 (including mixed systems)	-
Multinomial logit	Form of democratic accountability	36 (including mixed systems, Swaziland, and Egypt)	-
Multinomial logit	Form of democratic accountability	28 / 34	News from mass media included
Multinomial logit	Form of democratic accountability	34	Ethnic diversity included
Multinomial logit	Form of democratic accountability	34	Free and fair elections included
Multinomial logit	Form of democratic accountability	34	Corrupt parliamentarians included
Multinomial logit	Form of democratic accountability	34	Trust in legislature included
Multinomial logit	Form of democratic accountability	34	Colonial legacy included
Multinomial logit	Form of democratic accountability	34	District magnitude included
Multinomial logit	Form of democratic accountability	34	Timing of survey included
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Financial support for Afrobarometer Round 7 has been provided by the Swedish International Development Cooperation Agency (SIDA), the Mo Ibrahim Foundation, the Open Society Foundations, the Bill & Melinda Gates Foundation, the William and Flora Hewlett Foundation, the U.S. State Department, the U.S. Agency for International Development (USAID) via the U.S. Institute of Peace, the National Endowment for Democracy, and Transparency International.

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