The Determinants of Local Leader Influence in Elections: A Lab-in-the-Field Experiment in Senegal^{*}

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Abstract

The implications of clientelism for electoral accountability are mixed. Political intermediaries redistribute needed resources; they also exploit their position to advance personal interests. I argue that two dimensions determine the accountability of local leaders: competitive selection and autonomy of leaders from their community. Exploiting variation in local institutions, I situate this study in three types of communities in Senegal where leaders are known to be influential in political decisionmaking. A novel coordination game measures when and why communities vote for a leader-preferred outcome relative to an instrumentally-preferred one. I find that voters are more likely to sacrifice personal gain when leaders are more autonomous and uncompetitively selected. An experimental manipulation of the game emphasizing the anonymity of elections reveals that fear of sanctions motivates voters to follow their leader, but only in contexts with autonomous leaders. Conversely, anticipation of future reciprocity better explains why voters follow more dependent leaders.

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1 Introduction

Clientelism, the contingent exchange of goods for votes, is often considered a perversion of democracy. Yet, its practical implications for electoral accountability are mixed. Local political intermediaries can exploit their bargaining position to advance personal interests; they can also extract resources from political parties and redistribute them among needy supporters. Existing studies provide evidence of both types of patron-client relationships: mutually beneficial ones in which leader influence is motivated by a carrot (Baldwin, 2013; Lindberg, 2010), and exploitative ones in which it is driven by a stick (Stokes, 2005; Lemarchand and Legg, 1972). This paper asks not whether patron-client ties serve or undermine voter interests, but when they do and why. I argue that variation in the accountability of local leaders¹ to their followers explains heterogeneity in outcomes across contexts. I then propose and test two characteristics of local institutions that condition leader accountability: competition in selection and autonomy from the community. Competitively selected leaders are more likely to have preferences aligned with their followers and less likely to resort to coercion; autonomous leaders, on the other hand, have greater capacity and fewer constraints to sanction voters who do not follow them.

I examine whether and how these characteristics of local institutions affect leader influence by exploiting pre-existing heterogeneity across Senegalese communities. A within-country approach has the benefit of holding other political, cultural and historical factors, and Senegal offers an ideal case with its rich diversity of local leader types (as described by Beck, 2008; Boone, 2003; O'Brien, 1975) and its demonstrated history of clientelist democracy (Koter, 2013a). A novel coordination game, played by 16 randomly selected participants in 16 villages of each leader type, measures whether voters follow their leader when it is not in their immediate interest to do so. This labin-the-field experiment simulates behavior in real elections while providing necessary control over stakes and preferences. Survey questions about coercion or undue influence in voting would be subject to strong biases resulting from fear of sanctions or unwillingness to portray a respected leader in a negative light. The coordination game provides more anonymity for the participants, incentivizes the revelation of true preferences through monetary stakes and encourages participants to consider expectations of how others will behave.

Participants in villages with more autonomous leaders are indeed more likely to yield to the leader's preference; the opposite is true in villages with more competitively selected leaders. An experimental manipulation of the game emphasizing the anonymity of vote choice reveals that fear of sanctions motivates voters to follow their leader, but only in contexts where leaders are relatively autonomous. Conversely, anticipation of future reciprocity better explains why voters follow more dependent leaders. Likelihood of future reciprocity from leaders is measured by survey data on the participant's receipt of private goods from the leader or public goods over which the leader has some discretion. The key findings – that competitively selected leaders are less likely to wield electoral influence, that more autonomous local leaders motivate compliance among followers through fear, and that dependent ones are beholden to followers for continued support – are verified with qualitative data from open-ended interviews with leaders and participants in a quarter of the sample villages.

The article's primary contribution is bringing together two rich literatures – on clientelism and on democratic accountability – that often fail to speak to one another. Applying the mechanisms of

 $^{{}^{1}}$ I use the terms local leader and political intermediary interchangeably to describe someone at the village-level who serves the role of political broker between individuals and the state or political parties.

electoral control to patron-client relationships yields insights about when and why clientelism has perverse consequences for democracy, and when it instead serves to bolster government accountability and responsiveness. The finding that local leader influence within Senegal is motivated by both carrots and sticks helps explain some of the heterogeneity across existing accounts of political intermediaries and their influence on voters.

Because it is too costly for politicians to reach voters individually, the exchange of votes for political patronage almost always relies on a local intermediary who has a customary relationship with voters. Indeed, Stokes et al. (2013) find that a broker-mediated model of clientelism explains divergent empirical findings better than models that ignore the role of brokers. While they study costs and benefits these brokers impose on party leaders, this work studies the costs and benefits brokers impose on voters. This complementary approach adds further support to the idea that political brokers play a critical role in clientelist party politics.

Examining when patron-client relationships generate accountability further contributes to the literature on overlapping formal and informal institutions. While democratic institutions rely on the logic of impersonal relationships between individuals and the state, informal institutions based on personal relationships of reciprocity and sustained by costly sanctions structure economic, social and political behavior. The consequences of overlapping institutions are theoretically ambiguous. Competition among institution types can improve judicial outcomes, particularly among marginalized populations (Aldashev et al., 2008; Sandefur and Siddiqi, 2013). In contrast, vote-buying, a practice thought to undermine democratic accountability, is sustained by commonly-held norms of reciprocity between brokers and voters (Finan and Schechter, 2012; Lawson and Greene, 2014). The existence of traditional leaders has also been shown to skew electoral results in favor of the incumbent party, undermining democratic competition and further entrenching local elites (de Kadt and Larreguy, 2014). This article identifies when a particular informal institution – patron-client relationships – has these salutary and detrimental effects on electoral democracy.

2 Variation in accountability across local institutions

Existing studies provide evidence of mutually beneficial patron-client relationships and exploitative ones. Voters in Zambia are not coerced by customary chiefs, but rather vote with them when they believe it is the best interest of the village to do so (Baldwin, 2013), strong existing patron-client ties in Southeast Asia increase distributive pressure on regimes (Scott, 1972), and Ghanaian legislators are held accountable to providing constituency service by traditional chiefs (Lindberg, 2010). Conversely, in Argentina, neighborhood-level brokers monitor voters, rewarding support and punishing defection (Stokes, 2005). Lemarchand and Legg (1972) argue that where the government is dependent on local patrons who control both economic production and the vote, national politicians will cater to patrons at the expense of citizens. As an example from the Senegalese context, former president Abdoulaye Wade tried to curry favor with village chiefs and religious leaders by offering them vehicles (Nossiter, 2012).

I argue this variation in leader influence can be explained by the extent to which local leaders are accountable to their community. To identify mechanisms, I refine theoretical insights from the literature on electoral control to better fit the case of unelected local leaders. Similar to the electoral context Barro (1973), citizens and their local leaders may have unaligned interests. Voting decisions

in a competitive democracy can be prospective in which the voter selects the candidate whose expected future performance they prefer, or retrospective in which the voter evaluates incumbent politicians according to some performance criteria.² These selection and sanctioning mechanisms can generate accountability among local leaders, I argue, even in the absence of regular, formal elections.

2.1 Competitive selection: greater accountability

Competition among candidates is a necessary condition for accountability in democratic elections (Schumpeter, 1942); it not only compels politicians to account to the public but also to be responsive to voter preferences (Downs, 1957). The informal institutions of local leadership selection depart from democratic elections in that there are no fixed term limits or systematic opportunities to reevaluate the incumbent. Even without the promise (or threat) of future re-evaluation, I argue that leaders who face selective pressures to accede to office will still be more preferred by the electorate relative to those who do not face competitive pressure.

Distinguishing features of competition include a common aim among competitors (to secure a leadership position), independent interests (only one person can win), and that the process is advantageous to a third party (the public) Bartolini (1999). Competitive systems can vary in their barriers to candidate entry and in the quota of the electorate whose votes are sensitive to influence by candidate characteristics or positions. Given these definitions, competitive selection can occur in the absence of regular opportunities for re-selection. In practice, competitive selection requires a mechanism, whether formal or informal, that provides multiple candidates reasonable opportunity to accede to office and aggregates preferences of a non-exclusive, reasonably broad portion of the population.

The driver of accountability in competitive selection is choice. If we assume that the distribution of leader types is the same across competitive and non-competitive places, then the ability to choose between leaders will generate better leader types. This is a very weak assumption given that places with competitive elections may have other features that generate better leader types to begin with. Better types may be leaders with preferences more closely aligned with the majority of the population or whom voters believe are less likely to act in their own interest. In sum, competitively selected leaders should be more likely to share the preferences of followers and less likely to rely on tactics that are distasteful to followers such as coercion.

There is evidence of both in the literature: when there is more competition in chief selection in Sierra Leone (more historic ruling families to choose between) (Acemoglu et al., 2014) and in Tanzania (Lierl, 2014), relatively better social outcomes obtain; and relative to appointed local officials, elected ones are less likely to influence voters in Indonesian elections (Martinez-Bravo, 2014). Bó et al. (2010) demonstrate another reason for which competitive leaders are less likely to use coercion: they are perceived as more legitimate and thus induce higher levels of cooperation. This is consistent with Baldwin and Mvukiyehe's finding that participatory selection of chiefs in Liberia makes them less likely to enforce contributions to public goods while still improving citizen participation and consultation. Grossman (2014) suggests such increased cooperation results from greater proclivity of groups with elected leaders to establish monitoring institutions.

 $^{^2 \}mathrm{See}$ Fearon 1999 for a discussion of sanctioning and selection models.

2.2 Autonomy of leaders from the community: lesser accountability

In classic moral hazard models of electoral control (Barro, 1973; Ferejohn, 1986; Fearon, 1999; Besley, 2006), accountability derives from the ability of voters to sanction poor performers. Without the formal mechanism of periodic elections, leaders may still be beholden to their constituents – if not for re-election then for something else. Without a monopoly on force or coercion, a leader may be beholden to his followers for income or status. This dependency can generate accountability of an unelected leader to his followers. As in the electoral context, for dependency to generate accountability, the interactions between leaders and followers must be repeated. Leaders can then be disciplined by the preferences of their followers because they want to guarantee future cooperation in the provision of those goods upon which the leader is dependent.

I argue that, in the absence of periodic elections, economic autonomy of the local leader from the community decreases his accountability. More autonomous leaders not only have more coercive capacity, but they are else less deterred by the threat of sanctions from the community because they risk less from causing disaffection among followers. Conversely, political leaders whose status and economic position are dependent upon the community will be more accountable to the followers in the interest of ensuring continued cooperation in a reciprocal relationship. Autonomous leaders are thus more likely to use coercion or exert unwanted influence over followers. A similar argument is made by Weinstein (2007) who shows that rebel organizations that depend on local populations for subsistence are less likely to commit violence against civilians than rebel groups with access to external resources because the dependent rebels need to ensure a reciprocal relationship with the civilians they control. Empirical support of this mechanism is also found in Afghanistan: accountability and abuse of authority varies by the degree to which villagers are economically dependent on the local elite (Pain and Kantor, 2010).

The logic behind this argument is also what drives theories of the resource curse. Stated thus by Huntington (1991), "Oil revenues accrue to the state: they therefore increase the power of the state bureaucracy and, because they reduce or eliminate the need for taxation, they also reduce the need for the government to solicit the acquiescence of the public to taxation." In other words, regimes made more autonomous from their citizenry by oil or other natural resource wealth become less accountable to and representative of their populations. While a leader's autonomy is often derived from wealth that can be extracted from the territory he governs, it can also come from foreign aid (Djankov et al., 2008), illicit trade (Weinstein, 2007), or membership in lucrative organizations as will be the case in Senegal.

3 Senegal context

Senegal is an ideal case in which to investigate questions about the impact of local leaders on electoral decision-making: existing literature characterizes its democracy as highly clientelist and it is further recognized for rich variation in local institutions. Much of Senegal's population lives in communities with strong hierarchical ties to a local leader. The preponderance of local elites with such ties to their communities makes clientelism via local intermediaries an attractive electoral mobilization strategy compared to mass-based ethnic appeals (Koter, 2013a). Lessons from this study are thus more appropriately generalized to countries where clientelist rather than ethnic appeals are the primary strategy of voter mobilization.



Research investigating how variation in local institutions impacts the relationship between clientelism and accountability should ideally minimize variation along other dimensions. While a crosscountry analysis can render significant variation in local leader types, additional variation in electoral institutions and the geographic units over which leaders preside complicates the analysis. I instead undertake a within-country study of a case with sufficient variation across local informal institutions. 87 percent of Senegalese belong to four major ethnic groups (Wolof, Peul, Serer and Diola) and although the vast majority of the population is Islamic, Muslims are subdivided into several politically-salient Islamic brotherhoods. These ethnic and religious groups differentially structure the behavior of leaders and their followers.

Another advantage of studying Senegal is the rich extant literature which I exploit to substantiate my categorization of leader types (O'Brien, 1975; Boone, 2003; Beck, 2008). These studies attribute variation in leader types to regional differences in pre-colonial state structures and ethnic or tribal affiliations, subsequent differences in interactions with the colonial state, and differences in the extent and type of Islamization. While they are primarily interested in explaining variation in relationships between local leaders and the state or political parties, this article focuses on the relationship between local leaders and their followers. In the context of a clientelist democracy where parties seek to establish mutually beneficial relationships with local leaders, I take for granted leaders' political influence in order to examine the impact of that influence on voter choices and community welfare.

3.1 Leader types in Senegal

Following Boone, I study three local leader types in Senegal: the Toucouleur, the Diola and the Mouride. The Toucouleur and Diola are ethnic groups while Mouride describes a Muslim brotherhood. The Mouride, however, are predominantly of the Wolof ethnicity and are concentrated in central Senegal. Figure 1 geographically locates these groups.

The **Mouride** brotherhood is perhaps the most well-known local institution in Senegal and the one most associated with clientelism. The Islamic Sufi order with its holy city Touba about 200 km east of Dakar is identified by O'Brien as the dominant local authority structure following the collapse of the pre-colonial state. During and after colonization, the Mouride marabouts or saints are the main intermediaries between the peasants of Senegal's populous groundnut basin and the state. Beck classifies Mouride marabouts as influential brokers because of the high level of deference they enjoy from their disciples or followers (often characterized as "blindly obedient") and the high level of autonomy from the state as a function of the state's dependence on brotherhood political support and the brotherhood's ability to mobilize resources without the state's support.

Because of the resource-rich, hierarchical organization of which they are a member, local Mouride marabouts are relatively autonomous from their local community. Their own status and well-being does not depend solely on their followers. Mouride disciples also have little choice in selecting their maraboutic leader whose position is typically inherited. The implications for the effect of Mouride leaders on voter welfare is not straightforward. Because marabouts derive their legitimacy, in part, from their ability to provide a social safety net for their followers, marabouts may use political clout to extract patronage valued by their followers. On the other hand, autonomous marabouts can exploit their position of power to their own advantage.

Toucouleur nobles are at the head of a similarly hierarchical social order in the northern Senegal River Valley. These "dependent brokers" according to Beck, derive their status from a centuries-old caste system within the Toucouleur ethno-linguistic group. Unlike Mouride marabouts, however, these rural elites owe their economic power to the Senegalese state. As noted by Boone, a declining economy in the region following independence undermined the traditional sources of Toucouleur noble's authority and wealth such that the "status and clout of the landholding oligarchy became more contingent upon controlling patronage resources...devolved to them from the center" (301).

The rigid caste hierarchies and endogamy predetermine social status giving Toucouleur peasants little choice in selecting elite political intermediaries. However, the elites are dependent on their communities for their position and status because of the lack of external resources or support. Implications for accountability are again mixed. Compared to the Mouride marabouts, Toucouleur nobles may be less able to acquire political patronage due to weaker bargaining power, but they also may have a less powerful hold over their followers.

In contrast to both these groups, the **Diola** ethnic group dominant in the southern Casamance region is known for its horizontal and relatively egalitarian society. According to Beck, "Political power [is] highly dispersed, with the gerontocracy of each [Diola] village selecting a chief without obligations to a broader regional authority" (164). As a result, there is no pre-ordained class of political intermediaries in this region which leads to real competition among potential local brokers. In contrast to the inherited status of the Mouride and Toucouleur leaders, Diola leaders are selected by heads of constituent families who also serve to constrain their leader's authority.

While Diola leaders are likely subject greater downward accountability, implications for their ability to extract patronage from the center are mixed. The lack of traditional elite authority can undermine the ability of local leaders to negotiate with the state or party patrons. As Boone puts it: "Dakar could not find interlocutors who were trusted enough, and powerful enough, to package local populations into secure and acquiescent electoral blocs that could be offered up to the ruling party" (99). But this cannot explain why "within Senegal's periphery, Lower Casamance has been



relatively "blessed" with state investment, dating back to efforts to develop rice production in the region after independence" (Beck, 2008, 179).

The leader types that comprise this study are arrayed along the two relevant dimensions in Table 1. While neither Boone nor Beck explicitly studies competition in leader selection, both align their cases along the related dimension of social hierarchy. In their studies, social hierarchy confers legitimacy or authority on local leaders. Here, I seek to show that less hierarchical societies with subsequently higher levels of competition in leader selection induce a more accountable relationship between leader and follower.

4 Sample selection

In this section, I describe sub-national data sources used to target the sample of communities. I then test the assumption that the selected leader types indeed influence electoral decisionmaking. To identify where specific leader types reside, I use the Senegalese census conducted between 2000 and 2002 (RGPH 3). Using individual-level observations, I calculate population size and proportion of individuals in each ethnic and religious group by village. There are a total of 13,075 rural villages and urban quarters. I concentrate my sample in rural villages where the influence of local leaders is known to be stronger Koter (2013b).

4.1 Sample

A village is categorized as belonging to a particular type if at least 75 percent of its population reports belonging to the group. I randomly sample 16 villages of each of the three types with the following qualifications. First, to take distance and financial constraints into account, I select from the three districts (départements) with the highest concentration of each group. Second, to enable analyses with electoral data, I only sample from villages that are polling stations and thus can be matched to the electoral data.

Using household survey responses from the project, I verify whether this sampling strategy yielded homogenous communities of the targeted types. Ninety percent of respondents in the Diola communities identify as Diola. About half of these identify as Muslim, 41 percent as Catholic and the remaining as animist. Ninety-seven percent of respondents in the Mouride communities identify as such and 81 percent as Wolof. Finally, 98 percent of respondents in the Toucouleur communities identify as Toucouleur or Peul, and 99 percent as Tidjane (Senegal's most populous Muslim brotherhood).

4.2 Voter coordination

A fundamental assumption of this project is that these leader types exert political influence. To test it, I examine the extent to which villages coordinate their votes, and whether the villages belonging to the ethnic and religious groups under study are more likely to do so. I measure voter coordination by the share of votes in a given village for the candidate with the plurality of votes in that village. This measure ignores the larger political context of any given election while focusing on the tendency for groups to vote together.

As evidence of how different types of communities vote, I match census data to polling station-level electoral data³ from the most recent presidential elections in 2012 in which there were 14 candidates on the ballot. Eighty-seven percent of the 5,811 rural polling stations are matched to villages.⁴ On average, 54 percent of individuals in a rural village vote for the same candidate; urban polling stations have a far lower mean plurality vote share of 36 percent.

To measure whether villages in the three groups of interest – Diola, Toucouleur, and Mouride – are more likely to coordinate votes, I construct one categorical variable for ethnicity and one for religion. Each categorical variable assigns a village to the dominant ethnic or religious group if 75 percent of the individuals in the village are of that group type.⁵ The variable takes a value of 0 if the population share of the largest ethnic or religious group is less than 0.75. I then regress the dependent variable, plurality vote share, on the ethnic and religious group variables.

Table 2 reports results of this regression.⁶ Each row reports the marginal effect on plurality vote share of 75 percent of the community belonging to each religious or ethnic group. Each category is compared to the base category of villages without a dominant ethnic or religious group. 38 percent of villages have no dominant religious affiliation and 23 percent of villages have no dominant ethnic affiliation. The three group types of interest – Diola, Toucouleur, and Mouride – and represent 4, 25 and 22 percent of the sample of villages respectively.

These results demonstrate a positive and significant correlation between plurality vote share and the three main groups under study. Individuals in Diola, Toucouleur and Mouride villages are 3 to 7 percent more likely to vote for the same candidate than individuals in more heterogeneous communities and in communities of the dominant religion (Tidjane) and ethnicity (Wolof). This is consistent with the proposition that local leaders in these groups are politically influential.

³From the independent electoral commission (CENA).

⁴Each polling station comprises one or several villages, but the data do not indicate where non-polling station villages vote. For this analysis, I use characteristics of the village in which the polling station is located as a proxy for polling station level characteristics.

⁵The category Toucouleur also comprises individuals who report their ethnicity as Peul and Pulaar because of the fluidity between these categories among respondents in my survey data.

⁶While all group types are in the sample, I only report coefficients on groups that comprise at least 3 percent of the total population of villages.

| Group name | Coefficient | | | |
|------------------|--------------|--|--|--|
| Religious groups | | | | |
| Mouride | 0.028** | | | |
| | (0.005) | | | |
| Tidjane | -0.005 | | | |
| | (0.005) | | | |
| Other Muslim | 0.014 | | | |
| | (0.020) | | | |
| Ethnic groups | | | | |
| Diola | 0.052** | | | |
| | (0.012) | | | |
| Toucouleur | 0.028^{**} | | | |
| | (0.006) | | | |
| Wolof | -0.019** | | | |
| | (0.005) | | | |
| Serer | -0.051** | | | |
| | (0.007) | | | |
| Intercept | 0.539^{**} | | | |
| | (0.004) | | | |
| Ν | 5,044 | | | |
| | | | | |

 Table 2: Effect of group type on plurality vote share

Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

5 Research design

The theoretical discussion in Section 2 has implications for several outcomes of interest. First, competitively selected leaders should exhibit behavior that is more closely aligned with preferences of their community; instances of unaligned preferences should be cause for followers to withdraw support. Second, competitively selected leaders should be less likely to be of a type that sanctions or uses coercion as a result of the initial choice constituents had in selecting them. And third, more economically dependent leaders should be less likely to be of a type that sanctions or uses coercion as the result of the anticipation of future reciprocal interactions.

I test these propositions using a novel coordination game in which leader and voter preferences are unaligned. There are two focal points or strategies in the game: one is more redistributive and instrumentally optimal for the participants, and the other is more remunerative for the leader. Voting for the leader-preferred option could have two substantive interpretations. A voter may be more likely to fear sanctions from a more autonomous leader, but she may also prefer autonomous leaders because autonomy is perceived to be a signal of a higher quality or more legitimate leader. An anonymity treatment discriminates between whether participants choose the leader-preferred outcome out of fear of sanctioning or due to beliefs of legitimate authority. In the former case, we would expect the treatment to have a significant negative impact on voting for the leader-preferred option; no effect in the latter case.

Using vote outcomes from the coordination game and anonymity experiment, I test the following observable implications of my argument registered in a pre-analysis plan:

- 1. Where leaders are more autonomous, participants will coordinate more on the leader-preferred outcome.
- 2. Where leaders are competitively selected, participants will coordinate more on the socially optimal outcome.
- 3. Where voters fear sanctions, the anonymity treatment should reduce voting for the leaderpreferred outcome; otherwise it should have no effect.

Surveys and a set of ultimatum games test alternative explanations. The ultimatum games measure beliefs about deference to authority and norms of fairness. The surveys measure concrete ways in which the leader has recently had a material impact on the individual.

5.1 Coordination game to measure influence of local leaders on vote choice

Simply asking whether voters are coerced or influenced to make electoral choices that are not in their interest risks substantial under-reporting due to social desirability bias. If voters are concerned that their choice is knowable to their local leader, they may be similarly concerned that their response on a survey is knowable. In addition, voters may not want to disparage their local leader to an enumerator. I implement a new measurement instrument – a coordination game – that seeks to uncover the extent to which voters in a given community make electoral choices that are not in their interest. Using lessons from behavioral economics, the game puts money at stake and asks

| | Election Outcome | | | | |
|--------------|-------------------|-------------------|----------------------------------|--|--|
| Player | $X: p_x \ge 0.75$ | $Y: p_y \ge 0.75$ | Ø: $p_x < 0.75$ AND $p_y < 0.75$ | | |
| I_j | 2 | 1 | 0 | | |
| L | 4 | 20 | 0 | | |
| Total payout | 36 | 36 | 0 | | |

Table 3: Player payoffs in US DollarsElection Outcome

players to consider others' preferences when making decisions to get a more accurate measure of beliefs and preferences.

The game's payoff structure creates two theoretically distinct focal points. One is an instrumentally (and socially) optimal outcome, X, in which the payoff to the participant (and other 15 players) is greater. The second outcome, Y, has a higher payoff to the leader lesser payoff to each participant. Payoffs are implemented when players coordinate on either outcome at or above the 75 percent threshold. Because players move simultaneously and payoffs are contingent on coordination, the game measures what players expect other players to do, or which outcome is most focal in their community: the socially optimal one or the leader-preferred one.

The game is played in the village square among a gender- and age-balanced random sample of 16 participants per village. Before playing, the most important political intermediary in the village is identified by the chief and surveys are conducted with the 16 players. After a rigorous explanation of the game rules involving visual aids, players vote using a secret ballot.

There are three possible outcomes o of the game: $o = \{X, Y, \emptyset\}$. Outcome X is implemented if at least 75% of (or 12) players choose X; Y is implemented if at least 75% of players choose Y; and \emptyset is implemented otherwise. Every player I_j has two possible strategies $S_I = \{x, y\}$; x is a vote for outcome X and y is a vote for outcome Y. The political intermediary, L, is not an active player in the game, but he is affected by game payoffs. For players (I_j, L) , payoffs of each outcome in local currency units are as follows: $X = (1000, 2000), Y = (500, 10000), \text{ and } \emptyset = (0, 0)$ (or see Table 3 for payouts in US dollar equivalents).

This payoff structure resembles a stag hunt. There are two Nash Equilibria, everyone plays X and everyone plays Y. In a typical stag hunt, the Nash outcomes represent an instrumentally superior outcome of mutual cooperation and a less risky outcome of mutual defection. In this game, one equilibrium similarly represents an instrumentally optimal outcome while the other represents an outcome that is materially sub-optimal but preferred by the leader. If individuals believe they may be sanctioned if they fail to choose the leader-preferred outcome, this is indeed a safer option. There are, however, other reasons an individual may choose the leader-preferred outcome such as a moral obligation. An anonymity treatment discriminates between these motivations.

The motivation to implement a coordination rule in this game is threefold. First, it would be relatively easier to free-ride and opt for the instrumentally optimal outcome in the absence of the coordination rule; the rule thus elicits more variation in game play. Second, the game not only captures individual preferences, but beliefs about others' preferences. In real elections in the Senegal context, voters have incentives to coordinate votes at the village level if they believe their villages can be rewarded or punished for marginal changes in vote share for the incumbent (see Smith and Bueno De Mesquita's (2012) discussion of contingent prize allocation and bloc voting).

Finally, if voters believe their vote choice is knowable and thus fear sanctions, then the extent of sanctions will depend on the proportion of other voters in the village who vote similarly.

The game protocol during a pilot in Senegal in 2012. After experimenting with whether or not to allow players to communicate prior to voting, I decided that prohibiting communication would induce greater variation in game play as well as limit the impact of potentially noisy contextual factors. To prevent communication during the game, participants were divided into 3 small groups, each led by an enumerator who monitored discussion within and across the sub-groups.

5.2 Anonymity treatment

There are two categories of reasons a player might choose the leader-preferred outcome in the coordination. She may feel some deference or moral obligation to a leader or she may fear sanctions by the leader if her choice is discovered. While the ballot in the game is functionally secret, voters often believe ballots are not secret even when they are. More than a quarter of the 1,024 respondents surveyed prior to playing the coordination game said it is probable that local political intermediaries know how they vote in real elections (12 percent said "very probable"). In the United States, an older and more developed democracy, Gerber et al. (2013) similarly find that 25 percent of voters believe the ballot is not secret and over 70 percent share their vote choice with others.

To test whether coercive authority is a determinant of voters coordinating on the leader-preferred outcome, I implement an experimentally assigned "anonymity treatment." A random half of villages in each village type receive an additional protocol that highlights the anonymity with which votes are cast in the game.⁷ The anonymity intervention consists of a script read by the enumerators prior to game play. I adapt language on the secrecy of voting from an information experiment in Pakistan conducted by Gine and Mansuri (2011) who find that women in treated communities are less likely to vote with their husbands. The script provides the following three types of information: 1) ballot secrecy is a legal right, 2) ballot secrecy applies to all citizens and from all citizens (leaders, elders, husbands do not have the right to know) and 3) ballot secrecy will be ensured during game play by opaque envelopes that conceal decisions from others and opaque ballot boxes with multiple ballots that conceal decisions from enumerators. Ballot secrecy is rigorously upheld in all games, but made salient through the provision of information in treated villages.

5.3 Ultimatum game to measure preferences

The anonymity treatment is a direct test of whether voters are motivated to follow their leader by fear of sanctions. To measure whether voters are instead, or even additionally, motivated by deference toward their leader, I employ a series of ultimatum games directly after the coordination game. Following the protocol in (Henrich et al., 2001), each participant is randomly assigned to be

⁷Blair (2013) similarly uses behavioral games to measure compliance with legitimate authority in Liberia and assures players of anonymity from both the authority in question as well as enumerators to minimize the effects of coercion and social control. Assurances in this experiment are material: decisions are made in private, envelopes conceal choices, and a bag containing dozens of envelopes protects against discovery. Because these material assurances of anonymity are already conferred by the electoral process in most countries, and because there are existing studies to measure the effects of monitoring electoral fraud, I implement an anonymity intervention that is informational in nature.

either the proposer (player 1) or the recipient (player 2). Pairs know they are playing with another member of the group, but not the exact individual. Proposers make an offer of 0 to 1000 CFA in increments of 100. Recipients state the minimum amount they are willing to accept from the proposer. If, in the predetermined pair, the offer is greater than or equal to the minimum amount accepted, the payout is made. Otherwise, nobody wins.

A second ultimatum game is played between each participant and the actual local leader identified during the coordination game. The leader is always the proposer and the participant the recipient. Because the leader is not in the room during game play, his proposal is assessed during the leader survey. To reduce priming effects, the order of game play is randomly assigned. The measure of deference toward one's leader is operationalized by comparing the minimum amount an individual would accept from the leader with the minimum amount the same individual would accept from a fellow participant. The less an individual is willing to accept from her leader relative to a fellow player, the more deferential is the individual to the leader.

5.4 Household and leader surveys

The day the coordination game is played in each village, a survey is first conducted with the village chief. The chief identifies the political intermediary in the village by name. When there are multiple intermediaries, the chief is asked to identify the most representative of them. A survey is then conducted with the designated political intermediary to generate evidence on leader type, leader preferences and leader accountability which I use to validate of the categorization of leader types.

The 16 game participants, stratified by age group and gender, are recruited using a randomwalk method. Upon receiving consent to participate in the game, a survey collects demographic information and data on receipt of material or financial goods (agricultural subsidies and a cash transfer targeted toward the poorest of the poor) over which the political intermediary might have some control. A unique code assigned to each participant links survey responses to behavior in the games.

Participants are asked to name the political intermediary in the village. The names given by participants match the name given by the chief in 58 percent of cases. This statistic is not significantly different across group types. That a majority of villagers agree on an individual who represents them as their political intermediary is further evidence of the existence and importance of such a position in the community.

The village chief and the political intermediary are the same individual in 6 villages, 5 of which are Mouride.⁸ In one Mouride village⁹, the political intermediary is also the marabout (and incidentally, the village chief); in two Toucouleur villages¹⁰, the intermediary is from the maraboutic family; and in one Diola village, the intermediary is a marabout from a different Sufi brotherhood, the Tidjane. While marabouts, or religious guides, are considered the main political intermediaries among Mouride communities in the existing literature, this is not so in the present sample. One reason for this discrepancy is the level of aggregation: we explicitly ask for the political intermediary

 $^{^{8}}$ Villages 28, 34, 38, 41, 58 and 59.

⁹Village 38.

 $^{^{10}}$ Villages 17 and 26.

of the village while marabouts often operate on a larger scale. For example, two sample villages claim the same marabout¹¹ and five report no marabouts living within its borders.¹² That said, village-level political intermediaries may have important connections to nearby marabouts: in one sample village the intermediary is reported to derive his legitimacy from his proximity to local marabouts.¹³ In addition, some villagers report following the political advice of the marabout when he is not the village's political intermediary.¹⁴

5.5 Measurement

The outcome of interest in the coordination game is the vote share for the leader-preferred option Y. Outcomes will be measured at the individual level with a binary indicator of whether or not an individual chooses Y. Because the game is strategic involving beliefs about individuals in one's own village, standard errors are clustered at the village level. And because of the binary nature of the dependent variable, I use logit regression. To measure the effect of the anonymity treatment on voting behavior, I use a dummy variable to indicate whether each individual is assigned to a treated or control village. I examine aggregate treatment effects over the entire sample as well as within each group type.

5.6 Qualitative data

Qualitative data from interviews with participants and village leaders supplements the survey and game data by uncovering more contextual information about leader type and verifying the extent to which behavior in the games reflect everyday life. Two local research assistants conducted qualitative interviews with four participants and the chief in a sample of 4 villages of each type several weeks after the study. Questions concerned political life in the village, the political intermediary who participated in the games, and respondents' political activity, along with specific questions for each village. Using transcripts from the 108 pages of interviews, a research assistant coded themes corresponding to components of individual political decision-making, individual-level opinions of political life in the village, perceptions of the leader, and position of the leader.

6 Data analysis

This section analyzes data collected in the games and surveys as well as qualitative evidence from follow-up interviews. First, I describe leader characteristics and how they vary by group type. Second, I examine when voters are most likely to follow the leader by analyzing correlation between the two determinants of interest – competitive selection and autonomy – and voter behavior in the game. Third, I report on why voters follow their leader – namely, whether it is out of fear of sanctioning. These results are from the randomly assigned anonymity treatment and so are causally identified. I find that only the Mouride demonstrate evidence of increased propensity to

¹¹Villages 33 and 34.

 $^{^{12}}$ Villages 35, 36, 39, 40 and 41.

¹³P1, Village 59.

¹⁴P3, Village 38; P1, Village 59.

| Leader type | Competitive selection | Cultivable hectares | Solid house |
|------------------------------|-----------------------|---------------------|-------------|
| DIOLA | 0.69 | 3.97 | 0.56 |
| Competitive/Not autonomous | | | |
| TOUCOULEUR | 0.06 | 4.53 | 0.40 |
| Uncompetitive/Not autonomous | | | |
| MOURIDE | 0.19 | 15.21 | 0.69 |
| Uncompetitive/Autonomous | | | |

Table 4: Means of indicators by leader type

vote with their leader due to fear of sanctions. Finally, I use survey and ultimatum game data to explore alternative mechanisms explaining the decision to vote with the leader, particularly among the Diola and Toucouleur.

6.1 Leader characteristics

The *a priori* categorization of leader types along the two dimensions of interest, competitiveness of selection and autonomy, is supported in the survey data. Sixty-nine percent of Diola political intermediaries were selected by election or broad consensus by a majority of the community. By contrast, only 19 percent of Mouride and 6 percent of Toucouleur were selected in this way; the remainder were chosen by village elites. The selection of village chiefs in these communities is even more striking: 56 percent of Diola chiefs are selected by election or broad consensus while all of the village chiefs in the other communities either inherit the position or are selected by village elites (elders or the marabout).

The autonomy of leaders as measured by different indicators of wealth also accords with expectations with the Mouride being the most well-off. The first column of Table 4 provides the mean of cultivable hectares of land belonging to the political intermediary and the second is the mean of a binary indicator of whether the house is made of solid materials such as cement or metal rather than mud or straw.

Qualitative data confirms that Diola leaders are more likely to be competitively selected and Mouride more likely to be autonomous. Participants in three of four Diola villages explicitly describe competition among different political intermediaries for support from villagers¹⁵; similar remarks are absent in Toucouleur and Mouride villages. Competition binds in at least one Diola village¹⁶ where the political intermediary's candidate lost in the recent elections because the leader is said to be lazy and failed to advance the needs of the community. As evidence of the absence of competition, Mouride leaders are significantly more likely to say their political beliefs converge with those of the village chief.

Diola participants describe the intermediary as dependent upon the support of the majority of villagers to maintain status; for instance, "the mandate of a political intermediary is indeterminate; the duration is as long as the population has confidence in him."¹⁷ Similarly, Toucouleur chiefs in

 $^{^{15}}$ Villages 2, 4, and 11.

¹⁶Village 12.

¹⁷Chief, Village 2. Translated by the author.

three of four villages for which we have qualitative data say the intermediaries depend on villager support to acquire status.¹⁸ A representative remark from one reads, "After being involved in politics, the villagers chose him to be the political intermediary as recognition of his engagement in developing the village."¹⁹ Only in the Mouride villages do we fail to observe direct participant comments about the intermediaries' dependence on villager support.

Perhaps as a consequence of competitive selection, the survey data indicates that Diola leaders are more highly educated than leaders in the other two groups, even controlling for average education of villagers. What distinguishes Toucouleur leaders from other villagers seems to be a greater involvement in politics: all four leaders identified in the qualitative data were already politically involved before becoming intermediary, two of these gained political experience outside the village²⁰. Mouride leaders, on the other hand, are set apart from ordinary villagers by their political connections. In the four villages for which we have qualitative data, intermediaries are either related to the chief or marabout²¹ or appointed by existing power-brokers²².

6.2 When voters follow the leader

Figure 2 shows the mean vote share for the leader-preferred outcome in the coordination game by group type. Consistent with expectations, voters in communities with more autonomous leaders (the Mouride) are more likely to choose the leader-preferred outcome – significantly more so than the two less autonomous groups, the Diola and the Toucouleur. Voters with the most competitively selected leaders (the Diola) are significantly more likely to vote for the instrumentally optimal outcome.

When interpreting these findings, it is instructive to consider a baseline expectation of participant behavior. The leader-preferred outcome is instrumentally suboptimal. Further, it is strategically rational to vote for the leader-preferred outcome if and only if one believes that at least 75 percent of other players will do so. This sets a relatively high bar for choosing the leader-preferred outcome. Thus, the finding that 30 percent of Mourides choose the leader-preferred outcome does not imply that 30 percent of participants prefer this outcome. Rather, it implies that 30 percent of participants believe that a preponderance of players in their village prefer that outcome.

The blunt comparison between average voting outcomes across group types is subject to omitted variable bias. There are numerous differences between groups other than the two dimensions of interest: competitiveness of selection and autonomy. To better isolate the relationship between these dimensions and voting behavior in the coordination game, I replace group-level dummy variables with village-level indicators of competitive selection and autonomy. The variable *Competitive selection* is an indicator that takes a value of 1 if the political intermediary is selected by election or by a majority of the community. The variable *Autonomy* is a mean effects index comprised of the two wealth indicators in Table 4. The index is constructed by first centering and standardizing each component variable and then taking their unweighted mean. In these regressions, I control for plausible alternative explanations that might be driving the relationship.

¹⁸Villages 27, 29, 31.

¹⁹Chief, Village 27. Translated by the author.

 $^{^{20}}$ Villages 25 and 29.

 $^{^{21}}$ Villages 39, 59. In Village 38, the intermediary is also the chief and marabout.

²²Village 37.



Figure 2: Mean voteshare for leader-preferred outcome, by group type

One distinguishing feature of the Diola ethnic group in the southern Casamance region is its unique experience with pre-colonial rule and colonialism relative to its northern neighbors. According to Boone (2003, p. 96), the Casamance "was never incorporated into the hierarchical states and empires that dominated the Senegambia region." Islam in the region is also less hegemonic and less likely organized in the form of centralized brotherhoods found in the north and center. While organized Muslim groups in central and northern Senegal were quite resistant to French colonization, the Diola "yielded more to the French in cultural terms" (O'Brien, 1975, p. 5) including cooperating with missionary activity, one result of which is the relatively higher levels of French education among the Diola.

Both weaker pre-colonial hierarchies and greater contact with the French could explain the negative relationship between the Diola and voting for the leader. I control for the first possibility with indicators for trust in traditional institutions and deference toward the political intermediary. I control for the second with the level of education of the respondent. I use trust in one's village chief as a proxy for the strength of local traditional institutions. Deference toward the leader is measured using the minimum amount of money a player says she will accept from the local leader, controlling for the minimum she will accept from a fellow participant. The survey question about chief trust is on a 7-point scale with greater values indicating higher trust. For the education level of the participant, a value of 0 indicates no formal education, 1 some primary education, 2 some secondary education, and 3 indicates completion of secondary or higher.

Because the construct of leader autonomy has to do with the wealth differential between leaders and members of their community, in the regression of the autonomy variable on voting behavior in the game, I control for the reported amount of cultivable hectares belonging to each participant as well as a binary indicator of whether the house is made of solid materials.

| ~ | 0 | 0 | <u> </u> | |
|--|----------------|----------------|---------------|---------------|
| | (1) | (2) | (3) | (4) |
| Competitive | -1.069^{***} | | -1.226^{**} | |
| | (0.338) | | (0.594) | |
| Education level | -0.269** | | -0.270** | |
| | (0.133) | | (0.134) | |
| Chief trust | -0.026 | | -0.019 | |
| | (0.073) | | (0.071) | |
| Amount accepted from leader (in 100s) | -0.080* | | -0.081* | |
| | (0.047) | | (0.046) | |
| Amount accepted from participant (in 100s) | -0.025 | | -0.023 | |
| | (0.036) | | (0.037) | |
| Autonomy | | 0.026^{***} | | 0.040^{***} |
| | | (0.008) | | (0.011) |
| Participant land | | 0.033^{***} | | 0.034^{***} |
| | | (0.013) | | (0.012) |
| Pariticpant household material | | 0.455^{*} | | 0.505^{**} |
| | | (0.248) | | (0.256) |
| Anonymity Treatment | | | 0.097 | 0.201 |
| | | | (0.287) | (0.281) |
| Anonymity X Competitive | | | 0.316 | |
| | | | (0.661) | |
| Anonymity X Autonomy | | | | -0.089** |
| | | | | (0.036) |
| Intercept | -0.280 | -1.624^{***} | -0.379 | -1.816*** |
| | (0.506) | (0.174) | (0.559) | (0.229) |
| N | 760 | 750 | 760 | 750 |
| | | | | |

Table 5: Effect of competitiveness and autonomy on voting for leader-preferred outcome

Standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table 5 shows that the results of these analyses largely accord with expectations. In Model 1, competition in leader selection is negatively and significantly correlated with voting for the leader-preferred outcome while in Model 2, leader autonomy is positively and significantly correlated.

6.3 Why voters follow the leader

The previous section demonstrates that voters sometimes follow the leader when it is not in their immediate interest to do so. This section interrogates why, and whether motivations differ by group type.

6.3.1 Fear of sanctions

To test whether choosing the leader-preferred outcome is motivated by fear of sanctions, I analyze the results of the anonymity experiment within and across leader types. Recall that villages in the

Figure 3: Effect of anonymity treatment on voting for leader-preferred outcome



anonymity treatment receive a script emphasizing the anonymity of the games. If fear of sanctions was driving participant behavior, we would expect less voting for the leader in the treated group relative to control. Figure 3 plots coefficient estimates for the regression of individual vote outcome on treatment status for the full sample and then each of the subsamples corresponding to leader type. Standard errors are clustered at the village level. The anonymity treatment has no effect in the aggregate, a positive effect on voting for the leader-preferred outcome among the Diola, and a negative effect among the Mouride. This finding is consistent with the idea that the Mouride, with relatively autonomous leaders, follow their leader out of fear of sanctions.

The positive effect of the anonymity treatment in the Diola villages is puzzling. Since voting for the leader-preferred outcome is a rare event among the Diola, occurring in less than 10 percent of the sample, this result might be spurious. However, the qualitative data provides one possible explanation. The dominant view regarding game play among the Diola is that one should maximize individual and communal payoffs by voting for the socially-optimal outcome. If this is the prevailing norm, then perhaps only in anonymity-treated villages did participants feel at liberty to shirk the norm and vote for the leader-preferred outcome.

As before, I test whether the impact of the anonymity treatment holds when using village-level indicators of competition and autonomy rather than relying on group type as a proxy. I expect the anonymity treatment to reduce voting for the leader-preferred outcome by minimizing fear of sanctions. Sanctioning capacity, I argue, is determined by the autonomy of the leader, not necessarily by competition in selection. Thus, we should expect the anonymity treatment to have an important interaction with autonomy but not with competitiveness of selection.

Model 3 of Table 5 shows there is no significant interaction between competitive leader selection and the anonymity treatment. By contrast, the coefficient on the interaction term between the treatment

indicator and autonomy is negative and significant in Model 4. The more autonomous the leader, the more the anonymity treatment reduces voting with the leader. This is what we should expect if the sanctioning capacity of leaders derives from their autonomy from the community. These results are consistent both with the theory and the findings in Figure 3.

Fear as a motivator was only mentioned once in all the qualitative data collection which is not surprising given the lack of anonymity of these open conversations relative to voting in the games. This mention of fear in a Mouride village is, however, an indication that my interpretation of participant play in the game is consistent with the interpretation of the game by participants: "The marabout is a seer and has other mystical powers but he doesn't have any disciples. People have a certain fear of him and as a result, the anonymity guaranteed a secret vote. That's why participants dared to vote freely, only worrying about their personal interest."²³

6.3.2 Anticipation of reciprocity

Though fear of sanctioning cannot explain why Diola and Toucouleur participants voted with their leader, about 9 and 23 percent of them still did. Theory suggests that competitively selected leaders are more likely to have preferences aligned with their constituents. Similarly, dependent leaders are more likely to act in the interest of followers because their very status is contingent upon local support. Though the game artificially manipulated stakes to ensure that leader and participant preferences were unaligned, it may still be the case that participants are responding to beliefs or information generated outside the narrow confines of the game.

Participants may be more likely to follow their leader in the context of the game if they believe the leader will use game winnings to reciprocate cooperative behavior. One observable implication is that participants who have benefited from transfers from the leader in the past are more likely to anticipate future transfers. I test this implication using survey data on past receipt of material benefits over which the leader has some control.

Figure 4 plots coefficient estimates of the regression of voting for the leader-preferred outcome on the three survey items that measure concrete ways in which the leader might provide benefits to the respondent: whether the respondent receives agricultural subsidies or government transfers over which the leader has some discretion, and whether the respondent receives cash or other material goods directly from the leader.²⁴ Standard errors are again clustered at the village level. The first two are examples of ways in which the political intermediary has some control over the targeting of publicly-provided goods. The latter instead refers to the distribution of private goods directly from the leader.

Being selected for government transfers is positively and significantly correlated with voting for the leader in the Diola communities. Receiving private goods from the leader is positively correlated with voting for the leader in the Toucouleur villages. In support of previous evidence, these survey items are never positively correlated with voting for the leader in Mouride villages, and there is even evidence of a negative relationship.

²³P3, Village 38.

 $^{^{24}}$ The sample size is slightly smaller than in the game analysis because I drop the 31 cases in which the individual who took the survey could not be located for the game and so was replaced by a comparable individual (same gender and age group).



Figure 4: Instrumental determinants of voting for leader-preferred outcome

6.4 Alternative explanations

Following one's leader out of fear of sanctions or anticipation of future benefit are both instrumental explanations. It may be, however, that some individuals are motivated to follow their leader out of pure deference – a deference that is not instrumentally motivated but rather an affective or spiritual attachment. The above results suggest that deference is not the sole driver of following one's leader. Here, I test whether one measure deference can explain part of the voter's choice to follow the leader.

Deference to the leader is measured using the minimum amount of money a player says she will accept from the local leader, controlling for the minimum she will accept from a fellow participant. If the player believes her leader is legitimate and accountable, she should expect relatively more from the leader. In the ultimatum game, this would translate into the Respondent asking for a greater minimum transfer of money in the game in which the leader is the Proposer. Those who accept relatively less are said to be more deferential. The wording in the game underscores this interpretation in that the player is asked, "what is the minimum amount of money you would accept from the Proposer?" Because half of participants are the Respondent in games with both the leader and a fellow participant as the Proposer, I use only half the sample.

I predicted that, using this measure, the Mouride would be more deferential than the other groups which is borne out in the data. Figure 5 shows the average amounts players expect from their political intermediary relative to a fellow participant by group type. According to this measure, the Mouride are significantly more "deferential" on average than the Diola. Interestingly, the Mouride expect the most from their leaders and the Diola the least, but the Diola leaders offer the



Figure 5: Difference in minimum amount accepted from leader vs. participant, by group type

most to game players on average (825 CFA) and the Mouride least (747 CFA), but these differences are not statistically significant.

If participants in the game vote for the leader-preferred outcome out of deference to authority rather than instrumental concerns, then more deferential players should be more likely to vote for the leader-preferred outcome. In Table 6, I regress the choice to vote for the leader-preferred outcome on the minimum amount a player will accept from the leader (in 100s of CFA francs), controlling for the minimum amount a player will accept from a fellow participant. Smaller coefficients on the amount accepted from the leader indicate higher levels of deference. The results show that among Toucouleur participants only, more deferential players are more likely to vote for the leader-preferred outcome.²⁵

A second alternative explanation is that preferences over fairness are driving game play rather than any decision-making criteria having to do with the leader. The coordination game provides voters with a choice over two outcomes: one that is instrumentally optimal and one that is preferred by the leader. The first option has the added advantage of being more "fair" inasmuch as the money is more evenly distributed among members of the community, including the leader. If game play is being driven primarily by norms of fairness, it can undermine our interpretation of the real influence of leaders.

To test whether this is the case, I evaluate the effect of an individual's action in the ultimatum game on his or her decision in the coordination game. The amount Player 1 offers to a fellow participant in the ultimatum game is a measure of the strength of an individual's fairness norm,

 $^{^{25}}$ This relationship is not contingent on anonymity. For the Toucouleur, deference is correlated with voting for the leader regardless of anonymity treatment.

| Table 6. Effect of feader deference on voting for feader-preferred outcome | | | | |
|--|----------------|---------|------------|--------------|
| | Total | Diola | Toucouleur | Mouride |
| Amount accepted from leader (in 100s) | -0.017 | -0.647 | -0.151** | 0.076 |
| | (0.064) | (0.421) | (0.069) | (0.098) |
| Amount accepted from participant (in 100s) | -0.032 | -0.172 | -0.045 | -0.127^{*} |
| | (0.061) | (0.296) | (0.071) | (0.076) |
| Intercept | -1.176^{***} | -0.516 | -0.372 | -0.715 |
| | (0.319) | (1.165) | (0.492) | (0.469) |
| Ν | 381 | 128 | 127 | 126 |

Table 6: Effect of leader deference on voting for leader-preferred outcome

Cluster-robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

Table 7: Effect of fairness norm on voting for leader-preferred outcome in first round

| | Total | Diola | Toucouleur | Mouride |
|--------------------------|-----------|----------------|----------------|---------|
| Amount offered (in 100s) | -0.039 | -0.147 | 0.079 | 0.009 |
| | (0.061) | (0.125) | (0.111) | (0.076) |
| Intercept | -1.155*** | -1.515^{***} | -1.640^{***} | -0.778* |
| | (0.308) | (0.526) | (0.603) | (0.427) |
| Ν | 379 | 128 | 127 | 124 |

Cluster-robust standard errors in parentheses. * p<0.10, ** p<0.05, *** p<0.01.

with greater contributions indicating greater preference for equity. First, I show in Figure 6 that Diola players offer more, on average, than the other groups. The Mouride also stand out in that they expect considerably more, on average, than is offered.

Next, I test whether the contribution of player 2 is related to the the same participant's decision in the coordination game. To do so, I regress each player 2's vote choice on the amount of his offer in the ultimatum game. Because each participant was randomly assigned to be player 1 or 2, this test is only conducted on half of the sample. The small and insignificant coefficients in Table 7 suggest that the amount a player offers in the ultimatum game cannot explain his or her vote choice in the coordination game.

6.5 The voter's calculus: in their words

The rich qualitative data obtained from four sample villages of each group type uncovers several trends that support the results of the quantitative analysis. First, Diola participants are far more likely to say they witness political campaigns and use this as input into their electoral calculus. Second, the Mouride participants are more likely to rely on someone else's preference when making their own election decision. I explore evidence for each in turn.

When asked to describe how they make electoral decisions, almost everyone (14 out of 16 participants) in Diola villages cites individual reasoning,²⁶ saying for example, "I decide on which candidate to vote for according to my convictions," or "I received advice on who to vote for from

²⁶P2-4, Village 2; P1-4, Village 4; P1-4, Village 11; P2-4, Village 12.



Figure 6: Amounts offered and expected, by group type

the intermediary and other political entrepreneurs, but that did not change my mind." Furthermore, 5 out 16 Diola participants²⁷ explicitly say they listen to electoral campaigns or speeches from candidates when deciding for whom to vote in elections; this is true for only one of the 16 Mouride participants.²⁸ A representative remark by a Diola participant reads, "During the elections, to decide which candidate to vote for, I try to listen to different speeches in order to see which is the best candidate who took into consideration the problems of the village."²⁹

Rather than individual reasoning, 7 out of 16 participants in the Mouride villages say they follow the advice of someone else when deciding how to vote. Of these, 2 participants cite the marabout or religious guide, one cites her husband, 3 cite close kin, and one cites the political intermediary as determining his or her electoral decision. One who cites the marabout remarks, "I don't have any specific criteria because I'm a disciple. It's sufficient that I have the indication from my marabout. In the absence of a *ndiguel*, I vote according to the preference of my husband."³⁰ In the household survey, 82 percent of Diola respondents say no one tried to influence their vote relative to 70 and 72 percent in the Mouride and Toucouleur communities. When asked theoretically the best way of designating a leader, one Mouride participant explicitly rejected elections because "it is not ideal since the loser can always manipulate those who are favorable to him through misinformation."³¹ Another agrees that "not everyone has the right to express herself or influence a decision, so people should instead have confidence in one person who is responsible for choosing the leader."³²

 $^{^{27}\}mathrm{P3}$ and 4, Village 2; P2 and 3, Village 4; P2, Village 11.

 $^{^{28}\}mathrm{P1},$ Village 38.

 $^{^{29}\}mathrm{P3},$ Village 2. Translated by the author.

 $^{^{30}\}mathrm{P1},$ Village 59. Translated by the author.

³¹P2, Village 37.

³²P3, Village 38.

7 Conclusion

To make sense of mixed theoretical predictions and empirical findings, this project set out to uncover whether certain features of local institutions condition whether and why a community chooses to vote with a local leader. I argued that competition in leader selection and the autonomy of a leader from the community can both result in a greater likelihood of voting with the leader. However, the mechanism driving the behavior is quite different. Competitively selected leaders are more likely to have preferences that align with those of their followers, generating electoral influence for instrumental reasons. Autonomous leaders are less downwardly accountable and have a greater capacity for coercion, so they are more likely to motivate followers through fear of sanctions rather than preference alignment.

I tested these theories by implementing a novel coordination game across three community types that differ along the proposed dimensions. When community and leader preferences are unaligned, as they are in the game, I find that voters with competitively selected leaders are less likely to support an instrumentally suboptimal outcome. Voters with more autonomous leaders are more likely to follow their leader in the same game. I discriminate between whether fear of sanctions or some other source of legitimacy is driving voter behavior with the anonymity experiment. I find that when voters are more cognizant of the anonymity of their vote choice, they are less likely to vote with the leader – but this only holds true in communities with autonomous leaders. This finding is consistent with the argument that only autonomous leaders will motivate followers with a stick rather than carrot.

To understand what motivates voters to choose the leader-preferred outcome in communities with dependent leaders, I test the inverse argument that more dependent leaders rely on instrumental rather than coercive means. Using survey data on past receipt of goods from the leader as a proxy for expectation of future receipts, I find this instrumental motivation indeed explains voting with the leader among communities with more dependent local leaders.

Finally, I test two salient alternative explanations that could be motivating behavior in the game. Using a series of ultimatum games played with the leader and fellow participants, I find that an individual's norms of fairness are not driving the decision of whether or not to vote for the leader-preferred outcome in the coordination game. Existing scholarship on Mouride intermediaries suggests that an affective attachment or legitimacy based on spiritual reasoning motivates followers. However, there is no evidence that more deferential Mouride followers are the ones voting for the leader-preferred outcome in the game.

Together, these findings have implications for the impact of local leaders on the accountability of elections. Where leaders are competitively selected and thus more downwardly accountable, voters may be better off in a clientelist system. Because preferences are more aligned, local leaders can use their patronage networks to obtain benefits of value to the community. However, where leaders are not competitively selected and not bound to the community by ties of dependence, then local leaders can exploit their position of influence to deliver votes and glean benefits that are not necessarily passed down to constituents.

References

- Acemoglu, Daron, Tristan Reed, and James A Robinson. 2014. "Chiefs: Economic Development and Elite Control of Civil Society in Sierra Leone." *Journal of Political Economy* 122 (2): 319–368.
- Aldashev, Gani, Imane Chaara, Jean-Philippe Platteau, and Zaki Wahhaj. 2008. "Custom in the Shadow of the Formal Law: An Economic Analysis." University of Namur (CRED).
- Baldwin, Kate. 2013. "Why Vote with the Chief? Political Connections and Public Goods Provision in Zambia." American Journal of Political Science.
- Baldwin, Kate and Eric Mvukiyehe. 2011. "The Effects of Participatory Processes for Selecting Leaders: Evidence from Changes to Traditional Institutions in Liberia." Unpublished manuscript.
- Barro, Robert J. 1973. "The control of politicians: an economic model." *Public Choice* 14 (1): 19–42.
- Bartolini, Stefano. 1999. "Collusion, Competition and Democracy." *Journal of Theoretical Politics* 11 (4): 435–470.
- Beck, Linda J. 2008. Brokering democracy in Africa: The rise of clientelist democracy in Senegal. Palgrave Macmillan.
- Besley, Timothy. 2006. Principled agents?: the political economy of good government. New York: Oxford University Press.
- Blair, Robert A. 2013. "Peacebuilding and State Legitimacy: Evidence from Two Lab-in-the-Field Experiments in Liberia." Available at SSRN 2326671.
- Bó, Pedro Dal, Andrew Foster, and Louis Putterman. 2010. "Institutions and Behavior: Experimental Evidence on the Effects of Democracy." *The American Economic Review* pp. 2205–2229.
- Boone, Catherine. 2003. Political topographies of the African state: Territorial authority and institutional choice. Cambridge: Cambridge University Press.
- de Kadt, Daniel and Horacio Larreguy. 2014. "Agents of the Regime? Electoral clientelism and traditional leaders in South Africa." Unpublished manuscript.
- Djankov, Simeon, Jose G Montalvo, and Marta Reynal-Querol. 2008. "The curse of aid." *Journal of Economic Growth* 13 (3): 169–194.
- Downs, Anthony. 1957. An Economic Theory of Democracy. New York: Harper & Row.
- Fearon, James. 1999. "Electoral Accountability and the Control of Politicians: Selecting Good Types versus Sanctioning Poor Performance." In Adam Przeworski, Susan C. Stokes, and Bernard Manin, (eds.) "Democracy, accountability, and representation," Cambridge: Cambridge University Press, pp. 55–97.
- Ferejohn, John. 1986. "Incumbent performance and electoral control." Public choice 50 (1): 5–25.
- Finan, Frederico and Laura Schechter. 2012. "Vote-Buying and Reciprocity." *Econometrica* 80 (2): 863–881.

- Gerber, Alan S, Gregory A Huber, David Doherty, and Conor M Dowling. 2013. "Is There a Secret Ballot? Ballot Secrecy Perceptions and Their Implications for Voting Behaviour." *British Journal of Political Science* 43 (01): 77–102.
- Gine, Xavier and Ghazala Mansuri. 2011. "Together we will: Evidence from a field experiment on female voter turnout in Pakistan." World Bank Policy Research Working Paper No. 5692.
- Grossman, Guy. 2014. "Do Selection Rules Affect Leader Responsiveness? Evidence from Rural Uganda." *Quarterly Journal of Political Science* 9 (1): 1–44.
- Henrich, Joseph, Robert Boyd, Samuel Bowles, Colin Camerer, Ernst Fehr, Herbert Gintis, and Richard McElreath. 2001. "In search of homo economicus: behavioral experiments in 15 smallscale societies." American Economic Review pp. 73–78.
- Huntington, Samuel P. 1991. The third wave: Democratization in the late twentieth century. Norman: University of Oklahoma Press.
- Koter, Dominika. 2013a. "King Makers: Local Leaders and Ethnic Politics in Africa." World Politics 65 (2): 187–232.
- Koter, Dominika. 2013b. "Urban and Rural Voting Patterns in Senegal: The Spatial Aspects of Incumbency, c.1978-2012." Journal of Modern African Studies 51 (4).
- Lawson, Chappell and Kenneth F. Greene. 2014. "Making Clientelism Work: How Norms of Reciprocity Increase Voter Compliance." Comparative Politics 47 (1): 61–85.
- Lemarchand, Rene and Keith Legg. 1972. "Political clientelism and development: a preliminary analysis." Comparative Politics pp. 149–178.
- Lierl, Malte. 2014. "Preferences or Incentives? Experimental Evidence on the Accountability of Village Leaders." Unpublished manuscript .
- Lindberg, Staffan I. 2010. "What accountability pressures do MPs in Africa face and how do they respond? Evidence from Ghana." *Journal of Modern African Studies* 48 (1): 117–142.
- Martinez-Bravo, Monica. 2014. "The Role of Local Officials in New Democracies: Evidence from Indonesia." *The American Economic Review* 104 (4): 1244–1287.
- Nossiter, Adam. 2012. "In Spirit and in Form, Ousted Titan Keeps a Hold Over Senegal." The New York Times, 18 June 2012.
- O'Brien, Donald B Cruise. 1975. Saints and politicians: Essays in the organisation of a Senegalese peasant society. Cambridge: Cambridge University Press.
- Pain, Adam and Paula Kantor. 2010. "Understanding and Addressing Context in Rural Afghanistan: How Villages Differ and Why." Afghanistan Research and Evaluation Unit Issue Paper Series.
- Sandefur, Justin and Bilal Siddiqi. 2013. "Delivering justice to the poor: Theory and experimental evidence from Liberia." Unpublished manuscript .

Schumpeter, Joseph A. 1942. Capitalism, Socialism and Democracy. London: Unwin.

- Scott, James C. 1972. "Patron-client politics and political change in Southeast Asia." The American Political Science Review pp. 91–113.
- Smith, Alastair and Bruce Bueno De Mesquita. 2012. "Contingent prize allocation and pivotal voting." British Journal of Political Science 42 (02): 371–392.
- Stokes, Susan C. 2005. "Perverse accountability: A formal model of machine politics with evidence from Argentina." *American Political Science Review* 99 (03): 315–325.
- Stokes, Susan C., Thad Dunning, Marcelo Nazareno, and Valeria Brusco. 2013. Brokers, Voters, and Clientelism: The Puzzle of Distributive Politics. New York: Cambridge University Press.

Weinstein, Jeremy M. 2007. Inside rebellion. Cambridge: Cambridge University Press.