# The Effects of Participatory Processes for Selecting Leaders: Evidence from Changes to Traditional Institutions in Liberia * 

Kate Baldwin ${ }^{\dagger}$ and Eric Mvukiyehe ${ }^{\ddagger}$

September 2011


#### Abstract

A number of recent field and lab experiments have shown that participatory processes result in greater levels of cooperation, institutional legitimacy and political efficacy. However, there are concerns that effects observed in these novel environments may not apply when pre-existing institutions are democratized. We identify the effects of participatory processes on established institutions by taking advantage of a break in the process of selecting clan chiefs in Liberia at the end of the civil war. At the end of the civil war, local chiefs in some areas were appointed by higher level authorities, while chiefs in other areas were selected by their communities; however, all chiefs who became incapacitated after 2002 were replaced by chiefs selected through participatory processes. We use difference-in-difference estimation in order to identify the effect of introducing participatory processes independent of timing effects. We draw on rich survey data and outcomes from behavioral games to show that the participatory selection of chiefs increases consultation at the community level and raises levels of participation. However, it also reduces levels of contributions to local public goods, suggesting chiefs selected by community members may be less effective at enforcing cooperation.


[^0]
## 1 Introduction

Political scientists have long been concerned with the effects of popular participation on governance (cf. Almond and Verba 1963; Huntington 1961; Madison). Although this field of scholarship has put forward strong theoretical arguments for why participation should affect governance, until recently, the area has been weak on empirical conclusions due to the difficulty of disentangling the causes and effects of participation. However, the recent rise of lab and field experiments has partially changed this. Recent experimental studies show that participatory processes result in greater levels of cooperation, institutional legitimacy and political efficacy (Baldassari and Grossman 2011; Dal Bó, Foster and Putterman 2010; Fearon Humphreys and Weinstein 2009; Olken 2010).

However, there are concerns that effects observed in these novel environments may not apply when preexisting institutions are democratized. Existing institutions are likely to have more authority and coercive power than newly imposed ones, and so the effects of participation may not be the same in these contexts. As a result, it is important to complement analyses of the effect of participation in new institutions with studies of the impact of introducing participation into established institutions. This is a challenge because it is more difficult to randomize the introduction of participation in long-established institutions. We identify the effects of participatory processes in established institutions by taking advantage of a break in the process of selecting clan chiefs in Liberia at the end of the civil war. At the end of the civil war, local chiefs in some areas were appointed by higher level authorities, while chiefs in other areas were selected by their communities; however, all chiefs who became incapacitated after 2002 were replaced by chiefs selected through participatory processes. We use difference-in-difference estimation in order to identify the effect of introducing participatory processes independent of timing effects.

The results partly confirm and partly differ from the findings of recent experimental research on participation in novel environments. We find that the participatory selection of chiefs results in more consultative processes at the community level and increases overall levels of participation. However, it also appears to reduce contributions to local public goods, suggesting that chiefs selected through participatory processes may be less effective as third-party enforcers of cooperative outcomes.

## 2 The Effects of Participatory Processes on Leaders and Citizens

The existing literature suggests that participatory processes affect both the leaders selected by these processes and the citizens who participate in their selection. First, participatory processes are thought to affect the type and behavior of leaders. They are thought to result in the selection of leaders who are more capable (Besley and Coate 1997), whose interests are more aligned with those of the electorate (Downs 1957; Mills 1991 (1867)), and who put more effort into serving citizens because they face sanctioning if they do not (Fiorina 1981, Ferejohn 1986). Second, participatory processes are thought to build the capacity of citizens to participate in other aspects of political life. The experience of participating in the selection of leaders may provide a training ground for other types of political involvement (Lindberg 2006) and create feelings of empowerment that lead to additional activity (Thompson 1970); furthermore, participatory processes reveal information about other's beliefs that can help coordinate citizen behavior and alter leaders' actions (Kumar 1991; Lohman 1993). Finally, participatory processes are thought to give legitimacy to outcomes. Institutionalized participation is thought to make individuals more likely to accept outcomes because they perceive the procedure by which they were made to be socially sanctioned and fair (Thompson 1970). In addition, the institutionalization of participation may reassure participants that outcomes can be revised at a later date (Przeworski 1999).

Given the centrality of this question to political science, there have been numerous cross-national, microlevel and experimental studies providing empirical evidence on the effects of participatory processes. Crossnational studies have shown that elected leaders provide more public goods (Baum and Lake 2001; Bueno de Mesquita et al. 2004; Stasavage 2005), engage in less wars (Maoz and Russett 1993; Russett 1995; Bueno de Mesquita et al. 2004), and are less corrupt (Mauro 1995) than their un-elected counterparts. Survey evidence has shown that participation is associated with higher levels of subsequent political participation (Brady, Verba and Schlozman 1995), social trust (Wollebaek and Selle 2003) and support for political systems (Finkel 1985, Finkel 1987). The challenge for many of these studies has been showing the observed relationship is actually causal, given that many of the outcome variables of interest could either cause participation, or be caused by a third variable that also affects participation.

A recent development has been the use of lab experiments to examine whether participatory processes
have causal effects on the behavior of participants in highly controlled environments. This is still a nascent field, but early results indicate that democratic processes lead to higher levels of social cooperation in public goods games (Baldassarri and Grossman 2011; Dal Bo, Foster and Putterman 2010; Sutter, Haigner and Kocher 2010; Tyran and Feld 2006). This literature has found only limited evidence that elections improve cooperation by allowing the selection of more effective leaders and institutions; for example, Baldassarri and Grossman (2011) do not find evidence that voters select leaders who are more likely than the average citizen to sanction defectors. However, the experiments consistently show that people are more willing to cooperate with institutions they themselves have selected; democratically chosen institutions lead to higher rates of cooperation than exogenously imposed institutions, independent of the informational effects of elections (Dal Bo, Foster and Putterman 2010; Grossman and Baldassarri 2011).

In parallel with the recent increase in lab experimental research on the effects of participatory processes, a number of scholars have conducted innovative field experiments in conjunction with development organizations that have randomized the introduction of participatory processes into communities. Bjorkman and Svensson (2009) show that leaders exert higher efforts to serve their communities after village meetings, Fearon, Humphreys and Weinsten (2009) demonstrate that democratic development institutions make people more likely to contribute to local public goods, and Olken (2010) finds that people believe outcomes to be fairer and more useful if they are decided by plebiscite. These studies are based on manipulations in people's real communities, and they are therefore more "natural" than lab experiments. However, in many field experiments, the control group receives no institutions, making it difficult to disentangle the effects of participation from other aspects of the institution. Furthermore, each of these studies examines participation in newly introduced organizational forms, raising the question of whether the results would apply in well-established institutions. It is noteworthy that Casey, Glennerster and Miguel (2011) do not find strong effects of democratic development institutions in their study, which had a longer follow-up period than other evaluations in this area.

Both the lab and field experiments conducted to date examine the effects of introducing participatory processes into novel contexts. But many political scientists studying democratization are interested in understanding the effects of introducing participation into well-established institutions. The decision-making process in the "non-participatory" control group in both lab and field experiments cited above is likely to
be very different from that in long-established non-democratized institutions. In contexts where autocratic institutions are organic, they may have greater coercive power and higher effectiveness than new imposed institutions. Furthermore, there are reasons to think that introducing participation into well-established institutions may have more moderate effects than introducing it in novel contexts where people do not have expectations or established repertoires on which to draw. Thus, it is important to complement existing analysis of participation in new institutional forms with studies of participation in existing institutions.

The main challenge to studying participation in existing institutions is developing strategies that identify the effects of participation; clearly, few dictators would volunteer to be part of an experiment that randomly introduces elections into their society. Instead, this paper takes advantage of a break in the process of selecting chiefs after the Liberian civil war. At the end of the second civil war, local chiefs in some areas were appointed by higher level authorities, while chiefs in other areas were selected by their communities; however, all chiefs who became incapacitated after 2002 were replaced by chiefs selected through participatory processes. We use difference-in-difference estimation in order to identify the effect of introducing participatory processes independent of timing effects. This strategy allows us to identify the effect of selecting leaders of long-established local political institutions through participatory processes rather than appointment.

## 3 Background on Clan Chiefs and Identification Strategy

This paper examines the effects of participatory processes for selecting clan chiefs in rural Liberia, taking advantage of a break in the procedure for selecting these chiefs in some communities at the end of the civil war. Clan chiefs are the lowest level of government in rural Liberia. The country is divided into 15 counties, which are subsequently divided into 476 clans. The position of clan chief has its roots in the traditional chieftaincy institutions of the different ethnic groups in Liberia, but the powers and process of selecting clan chiefs have been revised at many points in the past century.

Historically, the power and process of selecting traditional chiefs varied according to the custom of the community. Among the Mande-speaking people of western Liberia, social structure was more hierarchical; the position of chief was hereditary, and only members of the chiefdom's founding lineage were eligible to be selected as chief (Murphy 1980; Murphy 1981). In contrast, among the Kwa-speaking people of
eastern Liberia, the political system was more decentralized, and leadership positions were more fluid. In these areas, the chief was determined by councils of elders representing each of the resident kin groups, and did not necessarily need to be selected from within the family of the leader who had founded the village (Moran 2006, pg 40-43; Seibel and Massing 1974, pg 29). Among both the Mande and Kwa-speaking people, chiefs generally ruled for life, although some groups had provisions for removing chiefs who acted egregiously (Moran 2006, pg 42).

As the Liberian government expanded its control of the interior during the first half of the 20th century, it tried to supervise the process by which chiefs were appointed. Following the death of the previous chief, representatives of the district commissioner's office were supposed to conduct "head-counts" in which members of the community lined up behind their preferred candidate (Moran 2006, pg 101; Gay 1973, pg 59-60). However, eligibility to run for office was still decided by customary criteria, and it is not clear how frequently head counts were actually employed.

In the mid-1960s, the Liberian government introduced modern local government structures, including county superintendents, city mayors and circuit courts in the rural hinterlands. Still, chiefs continued to play an important role in local administration. According to chapter 5 of the Local Government Law on Tribal Administration (1967), the tribal chief "may impose sanctions when his legitimate orders are not obeyed, provided these sanctions do not exceed the limits fixed by regulations issued by the Ministry of Local Government" (Best 1974, pg 44). Clan chiefs maintained courts and continued to play large roles in facilitating the administration of development activities in their communities.

The new Local Government Law was contradictory in its description of the procedure by which chiefs should be selected. It called for the election of chiefs for four-year periods "according to tribal custom under the immediate supervision of a representative of the Ministry of Local Government..." (Best 1974, pg 44). The law was silent on the appropriate method of selecting chiefs in cases where the election of chiefs was not tribal custom. In practice, some areas adopted elections for chiefs, while others kept their customary procedures for selecting chiefs by the decision of elders, traditional societies or higher level traditional chiefs. As a result, there was a great deal of variation in how chiefs were selected until the mid1980s, at which time the government under Samuel Doe instituted nation-wide elections for chiefs. The 1986 constitution stated that "there shall be elections of Paramount, Clan and Town Chiefs by the registered
voters in their respective localities, to serve for a term of six years." Nation-wide elections were held in 1986, but some communities resisted adopting elections to select their chiefs. ${ }^{1}$

The trend toward the institution of elections ended abruptly in the late 1980s. At this time, the Doe government began appointing clan chiefs in the hope of gaining greater social control over rural communities. ${ }^{2}$ With the onset of the first civil war in 1989, many chiefs fled or were killed, and in rebel-occupied areas, new clan chiefs were either selected by communities or appointed by rebel-leaders. The situation became more complicated the more times territory was exchanged, with old chiefs being removed and new chiefs being selected through a variety of methods. Thus, at the end of the Liberian civil war, a great variety of methods were being used to choose clan chiefs, with about half of chiefs selected through participatory processes involving public votes or some other form of elections, and the other half appointed by higher level traditional or political leaders.

However, with the end of the war, participatory community-level processes for selecting chiefs have become the norm, even though the electoral commission has not formally organized any elections for clan chiefs. Since the fight for control of territory ended in early 2003, communities have been left to their own devices in selecting their chiefs, and they have almost invariably decided to hold public votes to select their new leaders. Community members are either asked to line up behind their preferred candidate or to raise their hand, and then each individual is counted. The counting is usually conducted by the local traditional council, although - if objections are raised about the council's objectivity - outside organizations or individuals may be asked to verify the count. The process of voting is public, and the counting of the vote is transparent. ${ }^{3}$

In all instances where the chief in 2002 has subsequently died, moved away or had their term in office end, they have been replaced by a public vote. There are a few instances in the data where the previous chief became sick and appointed a successor to take over his duties, or where higher level leaders fired and replaced the previous chief. However, in all instances where the previous chiefs' reign ran its natural course, the new chief has been selected by public vote. In contrast, in places where the chief in power in 2002 has not yet exited, the situation remains as it was at the end of the war, with communities evenly divided between having popularly selected chiefs and having appointed chiefs.

We can only speculate on why there has been close to universal convergence on the public vote as a
mode of selection. In some communities, the reintroduction of the plebiscite is a reversion to the accepted mode of decision-making prior to the upheaval of the war. In other communities, the end of the war appears to have inspired the introduction of participatory processes for the first time. We cannot pinpoint the exact reason why the end of the war inspired this change, but the trend is consistent with other scholars' finding that communities and individuals exposed to conflict are subsequently more likely to participate in politics (Bellows and Miguel 2006; Blattman 2009).

This break in the process of selecting chiefs provides a method of identifying the effects of participatory processes on various outcomes. Whether the local clan chief had their reign finish its natural course between the end of the war and the time of our survey (2010) should be unrelated to political dynamics in local communities. In Liberia, communities almost never force a chief out of office prematurely. Individuals frequently complain about their chiefs, but it is extraordinary for them to be removed during their terms in office. For example, when one elderly man was asked what he could do about a chief who had been forced upon his community, he said "Nothing. The only thing we are doing is to just pray that he dies so that we can put someone else there." ${ }^{4}$ The reasons the chief in office at the end of the war has left office in some places but has not in others should be driven by factors, such as the chief's health, that are tangential to the political dynamics of the community.

Thus, the year the previous chief died provides a proxy for whether the chief was selected by plebiscite in communities where the chief was externally appointed at the beginning of $2002 .{ }^{5}$ The problem is that the amount of time a chief has been in office and the year of the chief's appointment could also potentially have direct effects on political outcomes; chiefs appointed during the war could be qualitatively different from those appointed after the war for reasons other than the process by which they were selected, and the amount of time a chief has been in office could affect their relationship with the community. As a result, the paper considers whether the change in political outcomes caused by the installation of a new chief is larger in places that were non-participatory in 2002 (and so became participatory by virtue of the former chief's exit) than in places that were participatory in 2002 (and so did not change their selection procedure when the former chief exited). This difference-in-difference strategy allows identification of the effects of participatory strategies independent of timing effects. Alternatively, the difference-in-difference strategy can be thought of as estimating the differences in outcomes between places that adopted participatory processes
early and places that did not, subtracting out the differences that exist between these two types of places even once they have the same political institutions.

Table 1 provides more specific details on the fate of the chiefs that were appointed and those that were selected by participatory processes in 2002. Row A considers the appointed chiefs. In 22 cases, the chief in power in 2002 is still in power. In 9 cases, the chief in power in 2002 was removed for "exogenous" reasons - they died of natural causes, they moved away, they became incapacitated, or their fixed mandate ended. ${ }^{6}$ In two cases, the chief in power in 2002 was removed for "endogenous" reasons - they were fired by higher level leaders. The timing of the change in these communities is clearly endogenous to the previous chiefs' performance, so they are considered to have been exposed to a competing risk and are dropped from the analysis. Row B provides details on the chiefs that were selected by participatory processes in 2002. In 25 cases, the chief in power in 2002 is still in power and in 7 cases the chief was removed for "exogenous" reasons (death, moved away, mandate ended, illness).

The difference-in-difference analysis in the results section compares the difference in outcomes across the communities in different cells of row A to the difference in outcomes across the communities in different cells of row B. Alternatively, it is equivalent to comparing the difference in outcomes across the communities in different cells of column 1 to the difference in outcomes across the communities in different cells of column 2. Specifically, the difference-in-difference estimate is equal to:

$$
\begin{equation*}
\hat{\delta}=\left(\bar{y}_{A 2}-\bar{y}_{A 1}\right)-\left(\bar{y}_{B 2}-\bar{y}_{B 1}\right) \tag{1}
\end{equation*}
$$

or

$$
\begin{equation*}
\hat{\delta}=\left(\bar{y}_{B 1}-\bar{y}_{A 1}\right)-\left(\bar{y}_{B 2}-\bar{y}_{A 2}\right) . \tag{2}
\end{equation*}
$$

Although equations (1) and (2) are equivalent, the latter formulation may be slightly clearer in illustrating the identification strategy in this paper; whether the chief in power in 2002 has subsequently left office is considered the natural experiment, and whether a place is of type A (late adaptors of participatory methods) or type B (early adaptors of participatory methods) is non-random and needs to be differenced out.

The number of communities in each box is low, but in each community, approximately 15 respondents
were interviewed, so we are able to compare effects across large numbers of community members. However, it should be noted that the removal of the chief after 2002 is not a perfect proxy for whether the chief was democratically installed. Specifically, in two cases where the old chief became incapacitated after 2002, a new chief was appointed, rather than selected via participatory processes. (In the instances where chiefs were fired, their successors were also appointed, but these cases fall out of the sample.) These cases are indicated with stars in table 1. The first set of difference-in-difference analyses reported below include these cases, and should therefore be interpreted as the effect of the likely introduction of plebiscites. However, the second set of difference-in-difference analyses drop the cases where the chief was removed from office because they became incapacitated, leaving only the cases in which the exit of the chief exactly equates with the introduction of participatory processes.
[Table 1 about here.]

## 4 Balance Statistics

Table 2 examines whether the characteristics of places where chiefs are selected through participatory processes and those where chiefs are appointed are empirically well-balanced, as we would expect them to be if the selection process were randomly selected. The left-hand section of table 2 compares the characteristics of places where the chief has been selected by participatory processes to the characteristics of places where the chief has been appointed across the entire sample. Column 1 indicates the means of the variables in the communities where the chief was selected through non-participatory processes, and column 2 indicates the means of the variables in the communities where the chief was selected through participatory processes. The standard deviations of the variable are listed in parentheses below the mean, and column 3 indicates the p-value from an unequal t-test of the null hypotheses that the mean is not different across the two sets of communities. The variables in the table were constructed from a UNDP baseline survey conducted in 2004, geographic data from a variety of agencies, peacekeeping records, and survey respondents' recollections of their prior experiences.

Across the entire data set, we find that most variables are balanced across places that use participatory processes for selecting chiefs and places that do not. However, three variables show differences that suggest
participatory places may not be otherwise equivalent to non-participatory places. Specifically, places where chiefs are selected through participatory processes appear to have experienced more violent events during the war, they are more likely to have a peacekeeping mission in close proximity, and they have stronger histories of active associational life; more of the respondents (who were over 35) reported being active in at least one association in 1989 in communities where the current chief is elected. Each of these differences is statistically significant at the 90 percent confidence level. However, we actually observe fewer differences between places with participatory processes and places without them than many theories of democratization would lead us to expect. In particular, places with participatory processes are not larger, more densely populated, less remote and more educated than places without participatory processes. As a result, OLS estimates with appropriate controls probably provide an informative starting point for our estimatation strategy.
[Table 2 about here.]

The difference-in-difference strategy takes advantage of the fact that whether the chief in power in 2002 subsequently left office should be exogenous to other characteristics of communities. Places where the chief in power in 2002 was appointed through non-participatory processes and those where the chief in 2002 was selected through participatory processes are likely to be different, but amongst places where the chief in 2002 was selected through non-participatory (or, conversely, participatory) processes, whether that chief subsequently left office should largely be due to stochastic factors, such as the chief's health. Table 3 examines whether there is good balance between places where the chief in power in 2002 was still in power in 2010 and places where that chief had subsequently left office. Columns 1 and 2 compare places where the chief in 2002 was not selected by participatory processes (and, thus, the change in chief resulted in a change in the institution for selecting chiefs), and columns 4 and 5 compare places where the chief in 2002 was selected by participatory processes (and, thus, the change in chief did not result in a change in the institution for selecting chiefs). Overall, the table suggests that places where the chief left power and places where they did not are well-balanced. None of the differences between column 1 and column 2, or column 4 and column 5, are statistically significant at conventional levels, suggesting whether the chief in power in 2002 subsequently left office was exogenous to other characteristics of the community.
[Table 3 about here.]

## 5 Survey Instrument

The data employed in this paper were collected as part of a broader project on peace-building in post-civil war Liberia. ${ }^{7}$ The project involved interviewing clan chiefs and their subjects in 70 different clans in rural areas; in addition, community-level activities designed to measure contributions to public goods were administered in a seperate sample in the clan chief's village. The 70 clans were not randomly selected but cover 13 of the 15 counties in rural Liberia. ${ }^{8}$ Figure 1 shows the sampled clans are well-distributed throughout Liberia. Within each clan, the survey had a target sample size of 15 households. One enumeration area (EA) was selected from within each clan using information provided by the Liberia Institute of Statistics and Geo-Information Service (LISGIS), and then two villages were selected at random from within the EA; the 15 interviews were conducted within these two villages.
[Figure 1 about here.]

Data collection activities took place from December 2009 through January 2010 by an enumeration team managed by a private Liberian research firm, Subah Bellah Associates. The enumerators were trained extensively by one of the authors on the questionnaires, interview techniques, and human subjects protection principles. Quality control was conducted through unannounced visits to the teams. In addition, enumeration teams regularly reported global positioning satellite coordinates to ensure that enumeration was taking place in the correct localities.

The surveys asked clan chiefs and community members about their attitudes, attributes, and previous and past political behaviors. In addition, the research project involved a real-life public goods game with 25 additional individuals selected from within the clan chief's village. This game assessed the willingness of community members to contribute to public goods and their ability to work together to achieve common goals. The randomly selected community-members were invited to a central location, given a small amount of money for their participation, and then asked to vote on which of five community-level projects their community needed. Once they had decided on the project, they participants were told that they could anonymously contribute some share of their payment to a communal fund. If the total contribution was at least half of the project cost, they were told that the project team would add another half and help the community get the project. If the total fund contributed was less than half of the project cost, the respondents
were told that the contributed funds would be redistributed equally among the participants, regardless of whether they contributed to the fund or not. As part of this activity, the chief was separately asked about his preferred project, and whether the chief's views matched those of the community provides a measure of interest alignment. ${ }^{9}$ The game also had an important variant across communities; in a random selection of communities, the chief was present throughout the entire public goods game, while in the rest of the communities, the chief was not present when community members made their anonymous contributions to the communal fund.

## 6 Empirical Results

The study tests the effects of different processes for selecting clan chiefs on five families of outcomes that the existing literature suggests should be affected by participation. These families of outcomes are listed in table 4, along with the specific operationalizations of the outcomes in the survey and the predicted direction of the effect. We examine whether participatory processes result in (a) the selection of higher "quality" chiefs, (b) the selection of chiefs that make greater efforts to consult with the community and have more aligned interests, (c) greater levels of citizen participation within their communities, (d) greater levels of citizen engagement with and participation in politics more broadly, and (e) greater levels of contribution to local public goods.
[Table 4 about here.]

We present several different estimators of the effects of participatory processes on each of the variables outlined in table 3. The first is a simple OLS estimate of the effect of participatory processes on various outcomes. While this estimate could be subject to omitted variable bias or endogeneity, the fact that few variables correlate strongly with the presence of participatory processes in table 2 suggests the basic OLS estimate (with appropriate controls) may be informative about the direction of effects. The OLS estimate was estimated using the following equation:

$$
\begin{equation*}
y=\alpha+\beta X+\gamma P+\epsilon \tag{3}
\end{equation*}
$$

where $X$ is a vector of covariates and $P$ is a dummy variable indicating whether or not the current chief was selected through participatory processes. The OLS estimate of the effect of participation on the outcome of interest is $\gamma$. In all of the models that follow, vector $X$ includes the number of households in the clan in 2004, an estimate of the number of conflict events in the clan between 1989 and 2003 (logged), the presence of peacekeepers in the clan, and an estimate of the proportion of the community in 1989 that belonged to associations. When the dependent variable is an individual-level outcome, vector $X$ includes variables measuring the respondent's age, gender, formal education and household wealth (in 1999). Robust standard errors are reported for the clan-level outcomes, and clustered standard errrors (by clan) are reported in the individual-level models.

The second estimate is a difference-in-difference (DD) estimate, which compares the effect of the previous chief exiting office for exogenous reasons in places without participatory processes in 2002 (where the chief's exit proxies for the introduction of participation processes) and in places with participatory processes in 2002 (where the chief's exit did not result in the introduction of participatory processes). This estimate is equivalent to an intent-to-treat effect, as the exit of the chief does not perfectly predict the introduction of participatory processes. The DD1 estimate was calculated using the following equation:

$$
\begin{equation*}
y=\alpha+\beta X+\gamma A+\theta T 2+\delta A \times T 2+\epsilon \tag{4}
\end{equation*}
$$

where $X$ is a vector of covariates, $A$ is a dummy variable indicating whether the chief in power in 2002 was selected by non-participatory methods and $T 2$ is a dummy variable indicating whether the chief in power in 2002 subsequently left office. The DD1 estimate is the coefficient on $\delta$, which captures whether the effect of a change of chief is larger in places that did not use participatory processes to select their chief in 2002 (and therefore, the change of chief resulted in a change of the institution for selecting chiefs). The two cases where chiefs left power post- 2002 for endogenous reasons are excluded from the sample. Robust standard errors are reported for the clan-level outcomes, and clustered standard errrors are reported in the individual-level models.

The third estimate, DD2, was also calculated using equation 4 , but it excludes the three cases in row 2 in table 1 where the chief left office because he was incapacitated. Several of the sick chiefs subsequently
appointed their predecessors, rather than allowing them to be selected via a participatory process, and once these cases are excluded from the sample, the exit of the chief post-2002 perfectly predicts the introduction of participatory processes.

We first consider the effect of participatory processes on the attributes and behavior of clan chiefs. We measure the quality of chiefs three ways. A standard proxy for leader quality is their levels of education (cf. Besley and Reynal-Querol 2011); we proxy for chief's levels of education by constructing a dummy variable indicating whether their previous jobs imply secondary education. In addition, we consider whether chiefs have connections to their Members of Parliament, as this is likely to make them more effective. Finally, we consider whether the current chief is related by blood to the previous chief, as this implies a smaller pool of talent from which the chief is selected. The top part of table 5 shows that participatory processes do not result in the selection of more "effective" chiefs in so far as effectiveness can be captured by these measures. Chiefs selected by their communities are less likely to have held a previous job which implies some secondary education, less likely to know their MP, and more likely to be related to the previous leader.

However, the data show more support for theories that predict participatory processes will cause more consultation by leaders, and greater alignment of interests between leaders and citizens. We measure how consultative the chief is by considering the number of meetings held in the community in the previous year, and whether the last meeting was initiated by the chief. We measure the alignment of interests between chiefs and citizens by examining whether the chief chose the same project as the majority of the community in the public goods activity we conducted in the chief's community; this measure is a dummy variable indicating whether the chief's opinion was the same as the plurality opinion. The bottom section of table 5 shows that participatory places do not have significantly more meetings, but chiefs are significantly more likely to organize meetings in places where they are selected by participatory processes, suggesting they feel a greater obligation to consult their community in these cases. In addition, the chief was slightly more likely to say he preferred the same project as the rest of the community members in the behavioral game in cases where he had been selected through participatory processes.
[Table 5 about here.]

Next, we consider the effect of participatory processes on the behavior of clan residents. The experience of participation is hypothesized by many scholars to increase the participation of community members in other types of governance and political activities. We consider whether selecting chiefs through participatory processes increases both community level participation and participation in the broader political sphere. We look at four dichotomous measures of community-level participation: whether an individual discusses politics frequently, whether they have attended community meetings in the past year, whether they have spoken at community meetings in the past year, and whether they have met with the clan chief in the past year. We also consider a number of distinct forms of participation in national politics. We examine whether an individual met their MP or senator, called a radio show, or attended a peaceful protest in the previous year. We also create an index of political participation counting the number of the following activities an individual had participated in either during the past year or during the last election campaigns (in 2005): voting, contributing to campaigns, attending political rallies, contacting government officials, contacting MPs/senators, calling radio stations, and attending peaceful protects.

The evidence in table 6 suggests participatory processes do beget further participation. Respondents in communities with participatory processes for selecting their chiefs are more likely to discuss politics with family and friends, more likely to speak at community meetings and more likely to contact their clan chief. Furthermore, participatory processes at the local level appear to have effects that spillover into the national political sphere. Individuals in communities with participatory processes for selecting their chiefs are more likely to have contacted their political representative, and more likely to have attended a peaceful protest. They also score higher on the general index of formal political participation. ${ }^{10}$
[Table 6 about here.]

Our study departs from the existing literature in its findings with regards to public goods provision. We have two measures of individuals' willingness to contribute to local public goods. The first measure is from the survey, and indicates whether respondents or someone in their family contributed to rebuilding infrastructure in their community in the past year. The second measure is from the behavioral activity, and equals the total amount of money community members contributed in the local public good; because the levels of contribution in each community were not normally distributed, I have taken the $\log$ of one plus the
total amount of money contributed. Table 7 shows that individuals in participatory communities were no more likely to report contributing to rebuilding infrastructure in their communities than individuals in nonparticipatory communities. Furthermore, in our behavioral games, respondents in participatory communities contributed significantly less money to public goods. The average level of contribution in the public goods game is significantly lower in places where the chief was selected though a participatory process.

## [Table 7 about here.]

Together, these results suggest that introducing participatory processes, such as public voting, for selecting chiefs improves the amount chiefs consult their communities, and increases levels of civic participation at both the local and national level. These results are consistent with other empirical literature on the effects of elections and participation, but they are noteworthy in that they suggest even when the ballot is not secret, popularly elected leaders are more consultative and articulate views that are more aligned interests with their communities. However, the findings also contradict some existing findings on the effects of participation. Public votes for chiefs do not result in the selection of more qualified leaders, in contrast to recent findings from the cross-national literature (Besley and Reynal-Querol 2011). They appear to narrow the breadth of candidates considered for office as compared to the case when outsiders appoint leaders. And perhaps the most interesting finding is that communities in which the chief is popularly selected do not have higher levels of contributions to public goods. In fact, the results from our public goods game suggests that these communities contribute significantly less. We discuss this result and why it is at odds with findings from recent lab and field experiments in the next section.

## 7 Discussion

The findings in this study contradict a key finding in recent lab and field experiments on the effects of participation. Lab and field experiments have consistently shown that participatory institutions lead to higher levels of contribution in public goods games (cf. Baldassarri and Grossman 2011; Fearon, Humphreys and Weinsten 2009; Sutter, Haigner and Kocher 2010; Tyran and Feld 2006). However, our study finds that individuals in communities where chiefs were selected through participatory processes contribute less in public goods games. This section considers possible reasons for our divergent finding. There are a couple
of differences between the "treatment" and "controls" in our study as compared to the experimental studies cited above, and we attempt to assess which of these differences is most relevant for explaining the divergent results.

First, the style and extent of participation in our "treatment" communities differs from most experimental studies. In most of the experiments cited above, all or almost all individuals in the "participation treatment" voted by secret ballot. ${ }^{11}$ In contrast, in our study, not all individuals in treated communities chose to participate in the selection of their chiefs, and voting was typically conducted in the open. However, it is noteworthy that we still find strong effects of participatory processes on the overall levels of political participation in these communities, which suggests that the ability to participate in the selection of chiefs reverberated across these communities. Furthermore, unlike the survey, which sampled individuals from throughout each clan, the public goods activity was conducted with 25 randomly selected individuals from the chief's village; these are precisely the individuals who are most likely to have participated in the selection of the chief. So different levels of exposure to participatory processes probably cannot explain our differential results. In addition, one could argue that voting in public versus in private mitigates individuals' feelings of empowerment and thus reduces the positive effect of participatory processes, but it is harder to see why this would result in a negative effect of participatory processes.

A second difference between our study and many of the lab experiments cited above is that we examine how variance in the selection of community leaders changes contributions in a public goods game; the public goods game provides a method of measuring cooperation within the community rather than the key variation of interest. In contrast, most of the studies cited above examine how variance in the procedures of public goods games change participants' behavior in that game (cf. Baldassarri and Grossman 2011; Dal Bó, Foster and Putterman 2010; Tyran and Feld 2006). Only the Fearon, Humphreys and Weinstein's study (2009) is similar to ours in that it examines how variance in broader political institutions affects behavior in a public goods game with uniform rules. Thus, it is possible that allowing people to participate in selecting the rules or leaders governing a specific activity has a positive effect on levels of cooperation within that institution, but a negative effect on levels of cooperation outside of that specific institution. Can this explain our divergent findings?

Our data allow us to examine empirically whether participation in the selection of institutions has dif-
ferential effects on activities under the jurisdiction of those institutions and activities outside of their jurisdiction. This is because we varied the extent to which the clan chief oversaw the public goods game across communities. In a randomly selected subset of the surveyed communities, the chief was present when individuals were asked to make contributions to the community project; in the other communities, he was not. If participation in choosing an institution has a positive effect on contributions supervised by that institution, we would expect participatory processes to have a positive effect in the subset of communities where the chief was present. However, the results in the bottom of table 7 show that participatory processes have a negative effect on contributions both when the chief is present and when the chief is not present.

Finally, it is possible that participatory processes and authoritarian appointments have different effects on the willingness of individuals to contribute to public goods depending on how recently institutions have been imposed. Participatory processes may result in people feeling more ownership over local decisionmaking and higher willingness to contribute to public goods immediately after their institution, but these feelings of public spiritedness probably decline with time. Many scholars have suggested citizens experience democratic disillusionment after founding elections at the national level (Bratton 1998), and we expect the initial public spiritedness fostered by participatory processes to fade with time at the local level too. In contrast, we hypothesize that newly instituted authoritarian regimes are likely to have less legitimacy than established authoritarian regimes; thus, on average, we expect the appointed leaders in our sample to have more coercive power than the newly imposed leaders or institutions in the control groups in the experiments cited above.

We cannot definitively test these hypotheses with our data set. Our sample is unbalanced over time because few chiefs have been selected by non-participatory processes since the end of the civil war, and we do not have a strategy for identifying the effect of participatory processes across all time periods. However, we can probe the plausibility of these hypotheses by examining how levels of contributions to public goods vary by the length of time participatory and non-participatory institutions have been established in communities.

Figure 2 examines contributions to public goods in communities where participatory processes were introduced when the current chief was selected. The graph includes only communities where the current chief was selected by participatory processes but the previous chief was not (so the installation of the current chief marked the establishment of participatory processes). The $y$-axis shows the average contribution
(logged) and the x -axis shows the year in which the current chief was installed. There is no clear linear trend in the data, although contributions are quite high in the cases where the current chief was selected less than 5 years before.

Figure 3 examines whether the effect of tenure on contributions differs for participatory and nonparticipatory institutions. The graph includes only cases where the installation of the current chief marked a change in the process of selecting chiefs - thus, the length of time the chief had been in power is the same as the length of time the institution for selecting chiefs had been established. ${ }^{12}$ The solid line indicates that the length of time participatory institutions have been established makes little difference to contributions; however, the broken line suggests that long established authoritarian regimes are better able to enforce cooperative outcomes than more recently established authoritarian institutions. The results are only suggestive; they are based on just 31 observations, and the difference between the two lines is not statistically significant at conventional levels. However, the evidence suggests that newly established authoritarian institutions do not have the same coercive power as long established institutions.

Figure 4 examines the effect of a leader's tenure in office on contributions by whether the leader was selected via a participatory process. Unlike in figure 3 , this graph includes all leaders regardless of whether their installation marked a change in the process of selecting chiefs. In this graph, newly appointed leaders are shown to be less effective than their long established counterparts (dashed line), but also new leaders selected through participatory processes are found to be slightly more effective than long established democrats (solid line). Again, the difference in the effects is not statistically significant at conventional levels, but the findings suggest the need for further attention to the hypothesis that time in power has different effects on leaders selected by participatory and non-participatory processes.
[Figure 2 about here.]
[Figure 3 about here.]

In sum, the effects of participation on contributions to public goods may depend on the length of time participatory and non-participatory institutions have been established. In contexts where institutions are new, existing research suggests participatory processes have significant positive effects of the ability of communities to work together. However, in contexts where non-participatory institutions have already been
established, participatory processes may have a negative effect on contributions to public goods because non-participatory institutions are more effective in these situations. The implication is that the effects of introducing local governments that are democratic may be very different from the effect of democratizing an autocratic national government.

## 8 Conclusion

Our study of chieftaincy institutions in rural Liberia finds that the introduction of participatory processes for selecting leaders has many salutary effects. As existing theories would lead us to expect, clan chiefs who are selected through participatory processes are more consultative and articulate goals that are more aligned with other community members. In addition, individuals in communities that select their chiefs through participatory processes participate more in community-level and national-level politics. However, some of our findings contradict recent experimental findings. In this context, the introduction of participatory processes for selecting chiefs does not result in the selection of higher quality leaders, and it reduces levels of contributions to local public goods.

The findings in this paper make two contributions. First, they suggest that increasing popular participation in the selection of traditional chiefs - even if this participation falls short of voting by secret ballot - has many of the same benefits as democratizing other institutions. However, the results also suggest that there are trade-offs to introducing participation, particularly in established institutions. In these cases, participatory processes appear to result in the selection of leaders who are less effective at enforcing cooperation than their non-participatory counterparts. We speculate that this is because long established authoritarian leaders have more coercive power than new leaders selected through non-participatory processes. Further research is necessary in this area, but the findings underscore the need to complement experimental analyses of participation in new institutions with well-identified analyses of changes in participation in established institutions.

## 9 References

Almond, Gabriel and Sidney Verba. 1963. The Civic Culture. Princeton: Princeton University Press.

Baldassarri, Delia and Guy Grossman. 2011. "Centralized-Sanctioning and Legitimate Authority Promote Cooperation in Humans." Proceedings of the National Academy of Sciences 108 (27): 11023-11027. Bellows, John, and Edward Miguel. 2006. "War and Institutions: New Evidence from Sierra Leone." American Economic Review 96 (2): 394-399.

Besley, Timothy and Stephen Coate. 1997. "An Economic Model of Representative Democracy." The Quarterly Journal of Economics. 112 (1): 85-114.

Besley, Timothy and Marta Reynal-Querol. 2011. "Do Democracies Select More Educated Leaders?" American Political Science Review. 105 (3): 552-566.

Best, Kenneth. 1974. Cultural Policy in Liberia. Paris: The UNESCO Press.
Bjorkman, Martina and Jakob Svensson. 2009. "Power to the People: Evidence from a Randomized Field Experiment on Community-Based Monitoring in Uganda." Quarterly Journal of Economics 124 (2): 735-769.

Blattman, Christopher. 2009. "From Violence to Voting: War and Political Participation in Uganda." American Political Science Review 103 (2): 231-247.

Brady, Henry, Sidney Verba and Kay Lehman Schlozman. 1995. "Beyond SES: A Resource Model of Political Participation." American Political Science Review 89 (2): 271-294.

Bratton, Michael, Robert Mattes and E. Gyimah-Boadi. 2005. Public Opinion, Democracy and Market Reform in Africa. New York: Cambridge University Press.

Bratton, Michael. 1998. "Second Elections in Africa." Journal of Democracy. 9 (3): 51-66.
Bueno de Mesquita, Bruce, Alastair Smith, Randolph Siverson and James Morrow. 2003. The Logic of Political Survival. Boston: MIT Press.

Casey, Katherine, Rachel Glennerster and Edward Miguel. 2011. "Reshaping Institutions: Evidence on External Aid and Local Collective Action." NBER Working Paper 17012.

Dal Bo, Pedro, Andrew Foster and Louis Putterman. 2010. "Institutions and Behavior: Experimental Evidence on the Effects of Democracy." American Economic Review 100 (December): 2205-2229.

Downs, Anthony. 1957. An Economic Theory of Democracy. New York: Harper Collins.
Fearon, James, Macartan Humphreys and Jeremy Weinstein. 2009. "Can Development Aid Contribute to Social Cohesion after Civil War? Evidence from a Field Experiment in Post-Conflict Liberia." American

Economic Review 99 (2): 287-291.
Ferejohn, John. 1986. "Incumbent Performance and Electoral Control." Public Choice 50: 5-25.
Finkel, Steven. 1987. "The Effect of Participation on Political Efficacy and Political Support: Evidence from a West German Panel." Journal of Politics 49: 441-64.

Finkel, Steven. 1985. "Reciprocal Effects of Participation and Political Efficacy: A Panel Analysis." American Journal of Political Science 29: 891-913.

Fiorina, Morris P. 1981. Retrospective Voting in American National Elections. New Haven: Yale University Press.

Gay, John. 1973. Red Dust on the Green Leaves: A Kpelle Twins’ Childhood. Thompson, CT: Interculture Associates.

Grossman, Guy. 2011. "Do Leader Selection Rules Have An Impact in Community Associations? Evidence from Uganda." Unpublished Manuscript, Princeton University.

Huntington, Samuel. 1968. Political Order in Changing Societies. New Haven: Yale University Press.
Kuran, Timur. 1991. "Now Out of Never: The Element of Surprise in the Eastern European Revolution of 1989." World Politics 44 (October): 7-48.

Lake, David and Matthew Baum. 2001. "The Invisible Hand of Democracy: Political Control and the Provision of Public Services." Comparative Political Studies 34 (6): 587-621.

Lindberg, Staffan. 2006. Elections in Africa. Baltimore: John Hopkins University Press.
Lohman, Susanne. 1994. "Dynamics of Informational Cascades: The Monday Demonstrations in Leipzig, East Germany, 1989-1991," World Politics, Vol. 47: 42-10

Maoz, Zeev and Bruce Russett. 1993. "Normative and Structural Causes of the Democratic Peace." American Political Science Review 87: 624-638.

Mauro, Palo. 1995. "Corruption and Growth." Quarterly Journal of Economics 110: 681-712.
Mill, John Stuart, 1991(1861). Considerations on Representative Government. Buffalo, N.Y.: Prometheus Press.

Moran, Mary. 2006. Liberia: The Voice of Democracy. Philadelphia: University of Pennsylvania Press.
Murphy, William. 1980. "Secret Knowledge as Property and Power in Kpelle Society: Elders versus Youth." Africa: Journal of the International African Institute 50 2: 193-207.

Murphy, William. 1981. "The Rhetorical Management of Dangerous Knowledge in Kpelle Brokerage.' 'American Ethnologist 8 4: 667-685.

Olken, Benjamin. 2010. "Direct Democracy and Local Public Goods: Evidence from a Field Experiment in Indonesia." American Political Science Review 104 (2): 243-267.

Przeworski, Adam. 1999. "Minimalist Conception of Democracy: A Defense." Democracy's Value. Eds. Ian Shapiro and Casiano Hacker-Cordón. New York: Cambridge University Press.

Russett, Bruce. 1995. Grasping the Democratic Peace. Princeton, NJ: Princeton University Press.
Seibel, Hans Dieter and Andreas Massing. 1974. Traditional Organizations and Economic Development: Studies of Indigenous Cooperatives in Liberia. New York: Praeger.

Stasavage, David. 2005. "Democracy and Education Spending in Africa." American Journal of Political Science 49 (2): 343-358.

Sutter, Matthias, Stefan Haigner and Martin Kocher. 2010. "Choosing the Carrot or the Stick? Endogenous Institutional Choice in Social Dilemma Situations." Review of Economic Studies 77 (4): 1540-66.

Tyran, Jean-Robert and Lans P. Feld. 2006. "Achieving Compliance when Legal Sanctions are Nondeterrent." Scandinavian Journal of Economics 108 (1): 135-56.

Thompson, Dennis. 1970. The Democratic Citizen. Cambridge: Cambridge University Press.
Wollebaek, Dag and Per Selle. 2003. "Participation and Social Capital Formation: Norway in a Comparative Perspective." Scandinavian Political Studies 26 (1): 67-91.

Figure 1: Geographic Location of Clans Included in Study


Figure 2: Contribution Levels By Year in Which Participatory Processes Introduced


Figure 3: Contribution Levels By Year in Which Institutions Adopted


Figure 4: Contribution Levels By Year in Which Leader Selected


Table 1: Fate of chief in power in 2002
$\left.\begin{array}{l|l|l|l}\hline & \begin{array}{l}\text { Column 1 } \\ \text { Chief in 2002 still in power }\end{array} & \begin{array}{l}\text { Column 2 } \\ \text { Chief in 2002 removed for } \\ \text { exogenous reasons }\end{array} & \begin{array}{l}\text { Column 3 } \\ \text { Chief in 2002 removed for } \\ \text { endogenous reasons }\end{array} \\ \hline \begin{array}{l}\text { ROW A } \\ \text { Chief in 2002 not } \\ \text { selected by } \\ \text { participatory } \\ \text { methods }\end{array} & \text { 22 old chiefs still in power } & \begin{array}{l}5 \text { old chiefs died of natural causes } \\ 2 \text { old chiefs moved away } \\ 1 \text { old chief's mandate ended }\end{array} & 2 \text { old chiefs fired** } \\ \hline \begin{array}{l}\text { ROW B }\end{array} & & 1 \text { old chief incapacitated* }\end{array}\right]$

Table 2: Balance between communities with and without participatory processes

|  | (1) <br> Non-participatory | (2) <br> Participatory | (3) $p$ value |
| :---: | :---: | :---: | :---: |
| Clan-level characteristics |  |  |  |
| $\begin{aligned} & \text { Number of households }(\log ) \\ & \text { (2004) } \end{aligned}$ | $\begin{gathered} 6.62 \\ (1.63) \end{gathered}$ | $\begin{gathered} 7.04 \\ (1.04) \end{gathered}$ | . 236 |
| Population density (1990) | $\begin{gathered} 30.6 \\ (83.9) \end{gathered}$ | $\begin{gathered} 28.3 \\ (31.3) \end{gathered}$ | . 895 |
| Distance to Monrovia (log) | $\begin{aligned} & 11.95 \\ & (.640) \end{aligned}$ | $\begin{aligned} & 12.01 \\ & (.717) \end{aligned}$ | . 719 |
| Prop. villages accessible by road in raining season (2004) | $\begin{gathered} .589 \\ (.280) \end{gathered}$ | $\begin{gathered} .561 \\ (.257) \end{gathered}$ | . 672 |
| Prop. villages with functioning schools (2004) | $\begin{gathered} .292 \\ (.329) \end{gathered}$ | $\begin{gathered} .274 \\ (.226) \end{gathered}$ | . 797 |
| Average rainfall (2004-07) | $\begin{aligned} & .158 \\ & .022 \end{aligned}$ | $\begin{aligned} & .151 \\ & (.015) \end{aligned}$ | . 192 |
| No. of violent events during war (log) | $\begin{gathered} .278 \\ (.593) \end{gathered}$ | $\begin{gathered} .613 \\ (.891) \end{gathered}$ | .066* |
| Peacekeeping force present | $\begin{gathered} .321 \\ (.476) \end{gathered}$ | $\begin{aligned} & .537 \\ & (.505) \end{aligned}$ | .077* |
| Aggregate characteristics of selected respondents Prop. respondents working in agriculture (1999) | $\begin{gathered} .349 \\ (.148) \end{gathered}$ | $\begin{gathered} .382 \\ (.144) \end{gathered}$ | . 366 |
| Prop. respondents belonged to at least one assoc. (1989) | $\begin{aligned} & .461 \\ & (.312) \end{aligned}$ | $\begin{aligned} & .585 \\ & (.236) \end{aligned}$ | .080* |
| Prop. respondents whose father attended school | $\begin{gathered} .435 \\ (.149) \end{gathered}$ | $\begin{aligned} & .391 \\ & (.162) \end{aligned}$ | . 249 |
| Prop. respondents that "hid" from rebels during war | $\begin{gathered} .602 \\ (.130) \end{gathered}$ | $\begin{gathered} .595 \\ (.136) \end{gathered}$ | . 825 |
| Prop. respondents with a family member injured by armed group | $\begin{aligned} & .326 \\ & (.130) \end{aligned}$ | $\begin{gathered} .350 \\ (.122) \\ \hline \end{gathered}$ | . 440 |

Table 3: Balance between communities where chief left office post-2002 and communities where chief still in power

|  | Places where chiefs not selected by participatory methods in 2002 |  |  | Places where chiefs selected by participatory methods in 2002 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (1) <br> Still in office <br> Not participatory | (2) <br> Left office Participatory | (3) $p$ value | (4) <br> Still in office <br> Participatory | (5) <br> Left office Participatory | (6) $p$ value |
| Clan-level characteristics |  |  |  |  |  |  |
| Number of households (log) (2004) | $\begin{gathered} \hline 6.64 \\ (1.77) \end{gathered}$ | $\begin{aligned} & 6.87 \\ & (.48) \end{aligned}$ | . 560 | $\begin{aligned} & 7.16 \\ & (.95) \end{aligned}$ | $\begin{gathered} \hline 7.23 \\ (1.66) \end{gathered}$ | . 841 |
| Population density (1990) | $\begin{gathered} 33.3 \\ (91.3) \end{gathered}$ | $\begin{gathered} 36.2 \\ (40.1) \end{gathered}$ | . 907 | $\begin{gathered} 28.0 \\ (6.27) \end{gathered}$ | $\begin{gathered} 23.7 \\ (12.6) \end{gathered}$ | 0.765 |
| Distance to Monrovia (log) | $\begin{aligned} & 12.1 \\ & (.55) \end{aligned}$ | $\begin{aligned} & 11.8 \\ & (.97) \end{aligned}$ | . 576 | $\begin{aligned} & 12.1 \\ & (.14) \end{aligned}$ | $\begin{aligned} & 11.6 \\ & (.25) \end{aligned}$ | . 119 |
| Prop. villages accessible by road in raining season (2004) | $\begin{aligned} & .575 \\ & (.283) \end{aligned}$ | $\begin{gathered} .502 \\ (.314) \end{gathered}$ | . 573 | $\begin{aligned} & .596 \\ & (.046) \end{aligned}$ | $\begin{aligned} & .595 \\ & (.105) \end{aligned}$ | . 998 |
| Prop. villages with functioning schools (2004) | $\begin{aligned} & .292 \\ & (.319) \end{aligned}$ | $\begin{gathered} .287 \\ (.271) \end{gathered}$ | . 968 | $\begin{aligned} & .286 \\ & (.048) \end{aligned}$ | $\begin{aligned} & .319 \\ & (.124) \end{aligned}$ | . 812 |
| Average rainfall (2004-07) | $\begin{aligned} & .158 \\ & .024 \end{aligned}$ | $\begin{gathered} .158 \\ (.014) \end{gathered}$ | . 988 | $\begin{aligned} & .151 \\ & (.016) \end{aligned}$ | $\begin{gathered} .148 \\ (.012) \end{gathered}$ | . 589 |
| No. of violent events during war (log) | $\begin{aligned} & .168 \\ & (.494) \end{aligned}$ | $\begin{aligned} & .461 \\ & (.686) \end{aligned}$ | . 293 | $\begin{gathered} .714 \\ (1.01) \end{gathered}$ | $\begin{gathered} .841 \\ (.814) \end{gathered}$ | . 740 |
| Peacekeeping force present | $\begin{gathered} .261 \\ (.449) \end{gathered}$ | $\begin{aligned} & .375 \\ & (.518) \end{aligned}$ | . 590 | $\begin{gathered} .583 \\ (.504) \end{gathered}$ | $\begin{gathered} .857 \\ (.378) \end{gathered}$ | . 144 |
| Aggregate characteristics of selected respondents |  |  |  |  |  |  |
| Prop. respondents working in agriculture (1999) | $\begin{gathered} .365 \\ (.141) \end{gathered}$ | $\begin{gathered} .315 \\ (.104) \end{gathered}$ | . 296 | $\begin{gathered} .414 \\ (.154) \end{gathered}$ | $\begin{gathered} .309 \\ (.111) \end{gathered}$ | . 179 |
| Prop. respondents belonged to at least one assoc. (1989) | $\begin{gathered} .512 \\ (.303) \end{gathered}$ | $\begin{gathered} .532 \\ (.142) \end{gathered}$ | . 808 | $\begin{gathered} .619 \\ (.253) \end{gathered}$ | $\begin{gathered} .476 \\ (.356) \end{gathered}$ | . 353 |
| Prop. respondents whose father attended school | $\begin{gathered} .417 \\ (.147) \end{gathered}$ | $\begin{aligned} & .399 \\ & (.158) \end{aligned}$ | . 778 | $\begin{aligned} & .376 \\ & .179 \end{aligned}$ | $\begin{aligned} & .454 \\ & .136 \end{aligned}$ | . 236 |
| Prop. respondents that "hid" from rebels during war | $\begin{gathered} .619 \\ (.157) \end{gathered}$ | $\begin{gathered} .613 \\ (.103) \end{gathered}$ | . 901 | $\begin{gathered} .643 \\ (.180) \end{gathered}$ | $\begin{gathered} .180 \\ (.126) \end{gathered}$ | . 125 |
| Prop. respondents with a family member injured by armed group | $\begin{gathered} .334 \\ (.138) \end{gathered}$ | $\begin{gathered} .377 \\ (.103) \end{gathered}$ | . 368 | $\begin{gathered} .350 \\ (.129) \end{gathered}$ | $\begin{aligned} & .303 \\ & .102 \end{aligned}$ | . 325 |

Table 4: Predicted effects of participatory processes

| Outcome | Operationalization of Outcome | Predicted Effect |
| :--- | :--- | :--- |
| Quality of Chief | Whether chief educated | + |
|  | Whether chief knows MP | + |
| Chiefs' consultative activities/ | Whether chief related to previous chief | - |
| alignment with community | Number of meetings | + |
| interests | Number of meetings initiated by chief | - |
| Community-level participation | Whether chief and community prioritize same projects | + |
|  | Whether discuss politics | + |
|  | Whether attend community meetings | + |
|  | Whether speak at community meetings | + |
| Broader political participation | Whether meet with chief | + |
|  | Whether meet political representative | + |
|  | Whether call radio programs | + |
|  | Whether attend peaceful protest | + |
|  | Participation index | + |
|  | Whether contribute money to rebuilding infrastructure | + |

Table 5: Effects of participatory processes on chiefs' characteristics and consultation

|  | OLS | DD1 | DD2 |
| :--- | :---: | :---: | :---: |
| Characteristics of chiefs |  |  |  |
| Educated | $-.17^{*}$ | $.33^{*}$ | $-.37^{*}$ |
|  | $(.10)$ | $(.18)$ | $(.22)$ |
| Know MP | -.07 | $-.41^{*}$ | $-.50^{* *}$ |
|  | $(.10)$ | $(.22)$ | $(.23)$ |
| Related to predecessor | $.35^{* * *}$ | $.54^{*}$ | $.52^{*}$ |
|  | $(.10)$ | $(.28)$ | $(.30)$ |
| Consultation of chiefs |  |  |  |
| Number of meetings | .84 | 4.36 | .94 |
|  | $(1.52)$ | $(4.79)$ | $(5.54)$ |
| Whether chief organized | $.25^{*}$ | $1.21^{* * *}$ | $1.33^{* * *}$ |
| last meeting | $(.13)$ | $(.25)$ | $(.30)$ |
| Same preferences as | .14 | .30 | $.36^{*}$ |
| community for project | $(.09)$ | $(.18)$ | $(.20)$ |

Table displays robust standard errors in parentheses. *, ** and $* * *$ indicate significance at the 90,95 and 99 percent confidence levels respectively.

Table 6: Effects of participatory processes on participation

|  | OLS | DD1 | DD2 |
| :--- | :---: | :---: | :---: |
| Community-level participation |  |  |  |
| Whether discuss politics | .074 | $.222^{* *}$ | $.188^{*}$ |
|  | $(.052)$ | $(.102)$ | $(.112)$ |
| Whether attended community | .003 | .037 | -.012 |
| meetings | $(.035)$ | $(.061)$ | $(.063)$ |
| Whether spoke at community | .010 | $.143^{*}$ | $.128^{*}$ |
| meetings | $(.034)$ | $(.073)$ | $(.075)$ |
| Whether met with clan | .002 | $.157^{* *}$ | $.177^{* *}$ |
| chief | $(.043)$ | $(.071)$ | $(.077)$ |
| National-level participation |  |  |  |
| Whether met political | $.059^{*}$ | .129 | $.162^{*}$ |
| representative | $(.030)$ | $(.087)$ | $(.096)$ |
| Whether called radio | -.002 | .051 | .082 |
| program | $(.020)$ | $(.053)$ | $(.051)$ |
| Whether attended peaceful | $.053^{* *}$ | $.178^{* * *}$ | $.157^{* * *}$ |
| protest | $(.025)$ | $(.050)$ | $(.058)$ |
| Participation index | .190 | $.915^{* *}$ | $1.053^{* * *}$ |
|  | $(.144)$ | $(.358)$ | $(.370)$ |

Table displays standard errors clustered by clan in parentheses. *, ** and ${ }^{* * *}$ indicate significance at the 90,95 and 99 percent confidence levels respectively.

Table 7: Effects of participatory processes on participation

|  | OLS | DD1 | DD2 |
| :--- | :--- | :--- | :---: |
| Whether contributed to | $-.095^{* *}$ | .041 | .051 |
| rebuilding infrastructure | $(.043)$ | $(.079)$ | $(.086)$ |
| Average amount contributed | -.114 | $-.761^{*}$ | $-.935^{*}$ |
| in public goods game (log) | $(.185)$ | $(.435)$ | $(.539)$ |
| Average amount contributed | .137 | -.564 | $-2.068^{* *}$ |
| (log) if chief present | $(.257)$ | $(.760)$ | $(.520)$ |
| Average amount contributed | -.417 | $-.878^{*}$ | $-.927^{*}$ |
| (log) if chief not present | $(.263)$ | $(.504)$ | $(.530)$ |

Table displays robust standard errors in parentheses. *, ** and $* * *$ indicate significance at the 90,95 and 99 percent confidence levels respectively.


[^0]:    *The authors would like to thank members of CAPERS, especially Oeindrila Dube, for helpful comments. An earlier version of this paper was also presented at the Alexander Hamilton Graduate Student Conference at NYU. Part of the project was completed while Baldwin was a visiting scholar at the Center for the Study of Democratic Politics at Princeon University.
    ${ }^{\dagger}$ Assistant Professor, Department of Political Science, University of Florida. Mailing address: 234 Anderson Hall, Gainesville, FL, 32611. Telephone: 917-375-7614. Fax: 352-392-8127. E-mail: kabaldwin@ufl.edu
    ${ }^{\ddagger} \mathrm{PhD}$ Candidate, Department of Political Science, Columbia University.

