

# Who Fights? The Determinants of Participation in Civil War

**Macartan Humphreys** Columbia University  
**Jeremy M. Weinstein** Stanford University

*A range of seemingly rival theories attempt to explain why some individuals take extraordinary risks by choosing to participate in armed conflict. To date, however, competing accounts have typically not been grounded in systematic, empirical studies of the determinants of participation. In this article, we begin to fill this gap through an examination of the determinants of participation in insurgent and counterinsurgent factions in Sierra Leone's civil war. We find some support for all of the competing theories, suggesting that the rivalry between them is artificial and that theoretical work has insufficiently explored the interaction of various recruitment strategies. At the same time, the empirical results challenge standard interpretations of grievance-based accounts of participation, as poverty, a lack of access to education, and political alienation predict participation in both rebellion and counterrebellion. Factors that are traditionally seen as indicators of grievance or frustration may instead proxy for a more general susceptibility to engage in violent action or a greater vulnerability to political manipulation by elites.*

Why do some individuals take enormous risks to participate as fighters in civil war? What differentiates those who are mobilized from those who remain on the sidelines? What distinguishes those who rebel from those who fight to defend the status quo? In spite of a large literature on the topic, scholars continue to debate the conditions under which men and women take up arms to participate in deadly combat. In this article, we examine the evidence for prominent, competing arguments in the context of Sierra Leone's civil war, drawing on a unique dataset that records the attitudes and behavior of 1,043 excombatants alongside a sample of 184 noncombatants.

Participation in violence is not simply a question of academic concern. Since 1945, civil wars have engulfed 73 countries and caused the deaths of more than 16 million people (Fearon and Laitin 2003). Understanding the motivations of fighters can shed light on the origins and

evolution of these conflicts. But it can also help in the evaluation of strategies of conflict resolution and postconflict reconstruction. If insurgent armies have been forged through the promise of resource rents from the extraction of minerals, peacemaking may depend on the ability of external actors to purchase the support of potential spoilers. If such armies have motivated participation instead by mobilizing popular discontent with government policies, postconflict arrangements may need to focus more on the establishment of institutional arrangements that address discrimination, oppression, and inequality. Data on individual participation in civil war offer insight into the formation and cohesion of armed factions, something that cannot be assessed using country-level data.

In this article, we revisit the literature and make existing theories operational and testable with microlevel survey data. In advancing a set of hypotheses, we focus attention on rebellion against the state and the organization

---

Macartan Humphreys is assistant professor of political science, Columbia University, 420 West 118<sup>th</sup> St., New York, NY 10027 (mh2245@columbia.edu). Jeremy M. Weinstein is assistant professor of political science, Encina Hall West, Room 100, Stanford University, Stanford, CA 94305 (jweinst@stanford.edu).

This research draws on a survey led by the authors together with the Post-conflict Reintegration Initiative for Development and Empowerment (PRIDE) in Sierra Leone. Financial support was provided by the Earth Institute at Columbia University, and logistical support came from the Demobilization and Reintegration Office of the United Nations Mission in Sierra Leone (UNAMSIL). We are particularly grateful to Alison Giffen and Richard Haselwood for their extensive work on this project; to Allan Quee, Patrick Amara, and Lawrence Sessay, our partners in the field at PRIDE; to Desmond Molloy at UNAMSIL; to students in our jointly taught graduate seminar on African Civil Wars who, through theoretical debates and empirical exercises, shaped the analysis offered in this article; to Bernd Beber for excellent research assistance; and to anonymous reviewers of this manuscript and participants in seminars at UCLA, Stanford, Columbia, McGill, and the annual meeting of the American Political Science Association for thoughtful feedback.

*American Journal of Political Science*, Vol. 52, No. 2, April 2008, Pp. 436–455

©2008, Midwest Political Science Association

ISSN 0092-5853

of civilian resistance to insurgent movements. A rich theoretical literature exists that focuses primarily on the decision to rebel. Here we contend, however, that this work has insights to help us understand both why some choose to challenge the government and why others rise in defense of the status quo.

Our empirical analysis raises questions about critical, yet untested assumptions that shape existing theoretical debates about mobilization. Prominent accounts of why people join are not necessarily rival; indeed, our analysis suggests that different logics of participation may coexist in a single civil war. Moreover, previous theoretical work on participation has too radically separated the decision to rebel from the decision to participate in violence more generally. The proxies for grievance that we (and other scholars) employ do predict rebellion, *but they also predict participation in defense of the state*. The most immediate interpretation of this finding is that marginalization produces a greater disposition to participate in violence, but not through the logic of protest underpinning classic arguments of rebellion. Our evidence suggests also that the widespread assumption that individuals have agency in making choices about participation is empirically suspect. Theoretical accounts have too rarely conceptualized abduction as a tool in a faction's menu of recruitment strategies, yet it appears essential in practice.

In undertaking this analysis, we hope to show how tools of survey research pioneered for the study of political participation in advanced industrialized democracies can be employed to analyze political behavior in situations of violent conflict. For obvious reasons related to access, much work on civil war mobilization is ethnographic and involves small samples of interview subjects. In addition, studies commonly select explicitly on the dependent variable—interviewing only participants in violence. But to properly assess competing explanations, we need a research design that permits a comparison of the characteristics of participants and nonparticipants. This study represents one of the first attempts to do this; in the concluding section, we provide thoughts on how to take this agenda further.

We begin our analysis with a brief discussion of the war in Sierra Leone and explain why it is a useful case in which to conduct our analysis. We then turn to previous work on mobilization for civil war and specify testable hypotheses about the conditions under which individuals join armed factions. The section that follows describes our data and research design. We then analyze variation in participation, using data on individual soldiers and civilians to explore the correlates of rebellion, the determinants of insurgent and counterinsurgent recruitment, and the interaction of various recruitment strategies. We

conclude with a discussion of our results and their relevance for theoretical debates about high-risk collective action.

## **The War in Sierra Leone**

### **A Brief History**

The war in Sierra Leone began on March 23, 1991, with a cross-border invasion by the Revolutionary United Front (RUF) from Liberia into the border districts of Kailahun and Pujehun. The group, formed originally by student radicals opposed to the one-party regime of the All People's Congress (APC), had received training in Libya, and subsequently, material support from the Liberian warlord and later president, Charles Taylor.

The advance of the rebels in the countryside was as much a product of the Sierra Leone Army's (SLA) failings as it was of RUF capacity. The APC government was deposed by a military coup in 1992 and replaced by the National Provisional Ruling Council (NPRC), which sought to achieve an outright victory over the RUF by hiring a South African security firm, Executive Outcomes, to help it prosecute the war in the mid-1990s. Following popular rallies and a palace coup, the country returned to civilian rule in 1996. The new civilian government, led by President Ahmed Tejan Kabbah and the Sierra Leone People's Party (SLPP), coordinated its actions with local civil defense militias that had first appeared in 1993–94, consolidating an offensive paramilitary force, the Civil Defense Forces (CDF).

In 1997, Kabbah was driven into exile following a military revolt. The coup brought a fourth group into the conflict, the military junta, or Armed Forces Revolutionary Council (AFRC). The AFRC forged an unlikely alliance with the RUF, inviting the insurgents to join a power-sharing arrangement. Following a Nigerian-led intervention in 1998, the democratic government was restored, and the AFRC/RUF alliance was removed from the capital.

The AFRC/RUF regrouped in the bush, rebuilding its military strength with resources garnered from international businessmen and arms suppliers that were willing to provide resources up front in exchange for mineral concessions. The combined forces launched a successful and devastating attack on the capital, Freetown, on January 6, 1999, although they were later repulsed by West African peacekeeping forces. Under tremendous pressure to consolidate control of its territory, Kabbah's government signed a peace agreement with the RUF in Lomé in July 1999.

However, this political solution to the Sierra Leone conflict was short-lived. In early 2000, a United Nations force (UNAMSIL) deployed to take the reins from the West African troops, but it was weak and poorly organized. Distrust was high, and the RUF reacted, taking large numbers of UN troops as hostages. British intervention alongside robust action by Guinean troops substantially weakened the RUF militarily. The government arrested large numbers of RUF leaders in Freetown, and with a more effective UN force in place, the warring factions were largely broken down and demobilized. President Kabbah, securely back in power, declared the war at an end in February 2002.

### Recruitment in the Sierra Leone War

Direct testimony offers some initial insight into patterns of recruitment. Accounts provided to the Truth and Reconciliation Commission (TRC) and the Special Court of Sierra Leone emphasize the systematic, but indiscriminate use of abduction by the RUF and the voluntary, more highly selective process employed by the CDF. According to one account given in testimony to the Special Court, onetime Liberian president Charles Taylor:

“... told Sankoh that, ‘Look, whenever you are fighting war, the strength of any revolutions, it depends on the manpower, the manner in which you carry out your recruitment... They have to recruit whoever they meet: old people, young people, young girls, young boys. They have to join the revolution and if they refuse to join, it means they are classified to be enemies. So you have to compulsorily recruit these people.’”<sup>1</sup>

Taylor’s advice, according to the witness, went unquestioned.<sup>2</sup> Reportedly, initial RUF recruits were a mixture of disaffected Sierra Leonean youths and intellectuals and Sierra Leoneans arrested by Taylor in Liberia. Later recruits were captives from village raids or abductions in refugee camps, including children, both boys and girls, in large numbers.

By contrast, accounts of CDF recruitment describe a more institutionalized and voluntary procedure. According to one officer:

“At district level, as well as chiefdom level, we put in place criteria for recruitment, and one of it was the person to be recruited, to be initiated into that society, should be a citizen of the chiefdom and should be 18 years and above and should not have any criminal record. He should be respectful to elders and his colleagues. He was to be nominated or screened by a special committee set—I mean, put in place by the chiefdom community... That the person willing to be initiated and recruited should be willing to stay within the community until the crisis was over.”<sup>3</sup>

This description is representative of many CDF accounts that emphasize a desire to defend the community. Such accounts are, however, not uncontested; some treatments point to the material benefits that accrue to fighters and others to the limited agency facing many younger recruits (Wille 2005). Similarly, although many RUF accounts emphasize abduction, others describe being motivated by a desire to rid Sierra Leone of injustice and corruption. In the testimony of the Rtd. Captain Kosia to the TRC, for example, he argues that “when Foday came, he told us that he had come to liberate us from the rotten system. Since I was one of those victimized by the APC regime, I joined him.”

Our own data provide answers largely consistent with these accounts. The most direct way to study why people joined is to ask them. In response to a question about one’s reasons for participation, 70% of CDF fighters reported joining because they supported the group’s political goals, while less than 10% of RUF recruits identified ideology as a motivation. Nearly half of the recruits in each group described joining because they were scared of what would happen if they didn’t, and 88% of fighters in the RUF describe being abducted (with only 2% in the CDF reporting the same). The full distribution of responses for members of the CDF and RUF is presented in Table 1.

These accounts provide a rich picture of the dynamics of recruitment in Sierra Leone. They reveal different patterns both across and within combatant groups. What they do not do is provide a handle on the social scientific question of why some people join and others do not. Or why some are abducted and others not? Or why some people fight against the status quo while others seek to defend it? It is these questions which we seek to answer through a systematic investigation of recruitment in Sierra Leone.

<sup>1</sup>Deposition in Sesay et al., 4 October 2004, p. 106, available at <http://www.sc-sl.org/Transcripts/RUF-100404.pdf>.

<sup>2</sup>For a description of actual practices implementing Taylor’s advice, see Rtd. Captain Kosia: Testimony to the TRC [Appendix 3, p. 65]. For other accounts, see Maclure and Denov (2006).

<sup>3</sup>Deposition in Norman et al., 1 June 2006, p. 106, available at <http://www.sc-sl.org/Transcripts/CDF-060106.pdf>.

TABLE 1 Why Did You Join?

	RUF	CDF
I supported the group's political goals	9.6%	70.4%
I joined to defend my community	1.1%	15.8%
People inside the group lived better than those outside	2.4%	2.3%
I was abducted	87.8%	2.0%
I was put under social pressure to join	0.3%	1.4%
In order to retaliate	0.3%	5.0%
I was scared of what would happen if I didn't choose to join	41.8%	51.2%
I was offered money to join	0.0%	0.4%
N	376	557

### The Significance of Sierra Leone's Civil War

A short history of the war and our description of recruitment patterns suggest that it was not unlike many recent conflicts in the developing world. It was a conflict of some duration, lasting 12 years—a quarter of civil wars since 1945 have lasted at least 12 years (Fearon 2004). It was also characterized by widespread atrocities. Estimates suggest that upwards of 50,000 were killed in the fighting, while the median number of battle deaths in recent civil wars is approximately 10,500 (Human Rights Watch 1998, 2003; Lacina 2006). Multiple military factions were formed, and more than 80,000 individuals (of approximately 4 million) took up arms to challenge the state, protect the government, or defend their communities. The frequency of abduction observed in Sierra Leone has also been a common feature of contemporary conflicts, witnessed in Liberia, the DRC, Sudan, Angola, and Northern Uganda, among other places (McKay and Mazurana 2002).

What makes the war in Sierra Leone particularly interesting from the perspective of mobilization is that it gradually became the poster child for theories that distinguished “new” civil wars driven by greed and economic motivations from “old” conflicts shaped by ideologies and political demands (Berdal and Malone 2000; Kaldor 1999). Yet some scholars have cautioned against drawing such simplistic distinctions among conflicts (Kalyvas 2001). This ongoing debate suggests that the question of why people participate in violence is as yet unresolved. And given the extensive debates that exist about motivations in the context of Sierra Leone, this is a good case in which to put existing theories to the test. We now turn to classic and more modern accounts of participation, extracting hypotheses that can be tested against new, microlevel data.

### Motivating Participation

At least three major schools of thought aim to explain patterns of participation (and nonparticipation) in civil war.<sup>4</sup> The first comes largely from scholars of revolution and pinpoints a range of expressive motivations, emphasizing the grievances that underlie participation. These approaches do not depend on rationalist foundations; instead, they highlight motivations rooted in individual frustration or a desire to act in the broader interest of one's social or economic group. Such arguments have been advanced largely to explain resistance to the state, yet they generate equally clear predictions about who will decide to defend the status quo.

Mancur Olson's (1965) analysis of collective action has given rise to two more approaches that accept, as a starting point, the idea that individuals weigh the costs and benefits of participation. The first emphasizes the importance of selective incentives—participation must be beneficial not only to groups but also to individuals. This in turn requires that private benefits be made available in exchange for participation. Critics that claim this reading of Olson is overly narrow or materialist focus instead on the importance of social sanctions. Strong communities can bring social pressures to bear that change how individuals evaluate the costs and benefits of joining a movement. The logic of both these approaches applies equally to insurgent and counterinsurgent mobilization.

Some have suggested that these arguments are rival or incompatible. Indeed, critiquing new approaches that seek to synthesize structural and collective action arguments that explain participation, Mark Lichbach (1998, 421) advocates “Popperian-type crucial tests among paradigms” in which competing predictions are placed in “creative confrontation” across a broad sample of movements, in a carefully chosen set of comparisons, or within a case study of a single movement. We are skeptical of the claim that the different arguments that have been presented are indeed rival. Theoretically, the case for a single explanation of participation appears weak. Here, however, we address this empirical question: can any one of the arguments presented in the literature succeed on its own in explaining participation?

<sup>4</sup>Wood (2003) provides an example of a fourth approach not tested in this article. She argues that participation in the insurgency in El Salvador was motivated by a set of moral and emotional considerations; in particular, she argues that recruits took “pleasure in agency” and that, in El Salvador, these process-oriented motivations are superior to conventional explanations.

## Grievance and Participation

Scholars of social revolution argue that the depth of an individual's discontent with his or her economic position in society is a major causal factor that differentiates participants in rebellion from nonparticipants. Discontent, when aggregated across individuals in a particular social class or ethnic group, provides the foundation for mobilization and the onset of violence against the state.<sup>5</sup> There are many variants of this basic argument, each emphasizing different elements of individual motivation.

The first identifies *social class* as the critical variable differentiating those who rebel from those who remain on the sidelines or, indeed, choose to defend the status quo.<sup>6</sup> Karl Marx, for example, proposed that the industrial proletariat would be the main engine of revolution against capitalist systems, owing to individuals' shared experiences of exploitation ([1848] 1968). However, the locus of participation in actual revolutions—poor, rural people rather than the urban working class—shifted the debate in the literature toward making distinctions among the mass of undifferentiated rural dwellers. Jeffrey Paige (1975), in an analysis of agrarian revolutions, concludes that wage-earning peasants drive rebellion in contexts where landlords, dependent on income from the land, are less able (or willing) to assent to peasant demands. James Scott's (1976) description of rebellion in Southeast Asia focuses on the subsistence crisis among peasants, demonstrating how population growth, capitalism, and the growing fiscal claims of the state pushed rural residents to the edge of survival. Intensive study of the Latin American revolutions suggests access to land, rather than poverty, as the main indicator of one's class position. Timothy Wickham-Crowley argues that peasants physically dislocated from land by elites, or those without access to it in the first place (squatters, sharecroppers, and migrant laborers), are the most prone to revolt (1992). Others have challenged this

<sup>5</sup>While this article focuses on individual-level determinants of participation, much of the literature emphasizing grievances seeks to explain why some countries experience revolution while others do not. Claims are made implicitly about what motivates individual participation; it is those claims that we seek to test in this article.

<sup>6</sup>Although we do not have the data needed to test the argument, a variant on standard class accounts suggests that what matters most is a psychological mechanism—relative deprivation. Rather than assessing one's position as compared to others in society, individuals may judge their situation relative to their own expectations and past experiences. Individual frustration with a gap between expectations and actual achievement, it is hypothesized, may be a sufficient condition for participation. James Davies (1962) first identified this mechanism in his study of revolutionary mobilization in the United States, Russia, and Egypt. Ted Robert Gurr (1970) offered a more general theory of deprivation, arguing that gaps between expectations and capabilities determined the degree of relative deprivation and the potential for violence.

focus on land, suggesting that income inequality is the prime source of discontent and motivator of participation (Muller and Seligson 1987).

A second approach focuses on ethnic and political grievances rather than class differences as the factor shaping an individual's decision to join a military faction. For some, the logic of ethnic mobilization begins and ends with long-standing cultural practices that distinguish ethnic groups. Differences between groups, sometimes reflected in a history of animosity between them, are believed to make conflict more likely (Horowitz 1985). The expectation this argument generates is of ethnically homogenous factions where one's identity is the key determinant of participation. For others, however, the interaction of ethnic difference and the process of modernization create the conditions for political violence (Horowitz 1985; Melson and Wolpe 1970). The upward social mobility made possible in an environment of economic change often rewards some groups over others, ultimately producing ethno-nationalist and separatist sentiments.

A third variant focuses on personal dislocation and the frustrations that arise from an individual's inability to express her concerns through "normal" nonviolent channels. Robert Merton emphasizes "anomie" as a source of deviant behavior as individuals use nonlegitimate means to attain goals such as wealth, power, or prestige that are valued in their societies but are unavailable to them through other channels (Merton 1949). Most recently, describing conflicts in West Africa, Robert Kaplan has emphasized how the weakening of social structures can account for the rise of violence (Kaplan 1994). Paul Richards, in a cogent critique of Kaplan's thesis, also emphasizes the frustration of individuals, but points to the growing isolation of most citizens from the loci of political decision making in Africa (Richards 1996).

Together, these three variants imply that an individual's social position determines his or her propensity to participate in violence. Individuals are more likely to join a rebellion if:

- H1: They are economically deprived.
- H2: They are marginalized from political decision making.
- H3: They are alienated from mainstream political processes.

Stories about the expressive motivations that drive participation in revolutionary collective action also generate clear predictions about the characteristics of those who will mobilize in *opposition* to rebellion. Class-based accounts imply that those in a relatively better economic position will have a stake in defending the status quo.

Theories constructed around the importance of ethnic and political marginalization suggest that members of ethnic groups that benefit from political power have stronger incentives to prevent a successful rebellion. Approaches that emphasize social or political alienation as a driver of participation imply that individuals active and engaged in mainstream political processes will mobilize to defend the existing political system. In accounting for participation in counterinsurgent mobilization, then, a grievances approach generates predictions opposite to those enumerated above.

These hypotheses are consistent with one set of arguments specific to the rebellion in Sierra Leone. Although he ascribes the origins of its leadership to student activists in Freetown, Richards (1996) describes ways in which the RUF exploited experiences of oppression, repression, and discontent among alienated rural youth. He points to political conflict on the border between Sierra Leone and Liberia, where supporters of the Sierra Leone People's Party (SLPP) found their political aspirations impeded by the dominance and corruption of the ruling All People's Congress. Richards identifies also the collapse of state infrastructure and the erosion of rural schooling opportunities as critical to understanding the RUF's expansion. Rebels and civilians alike, he argues, saw the rebellion as a chance to resume their education and to express their discontent with the misuse of Sierra Leone's diamond wealth for politicians' personal gain.

Participation in armed resistance to the rebellion has also been understood in terms of social class and political position. As the weak national army melted away under pressure from an emerging RUF, local defense militias became a major bulwark against brutal insurgent attacks in rural areas (Muana 1997). These militias reflected the existing power structure at the local level: mobilized and financed by chiefs who controlled access to land and levied taxes on local populations, the CDF was an amalgamation of local hunting groups and secret societies composed of young men tied to (and recruited through) existing political structures. Moreover, many civil defense militias cooperated closely with government troops (Keen 2005). Regent chief Hinga Norman, one of the chiefs most involved in setting up local defense militias, became Deputy Minister of Defence after the SLPP came to power in 1996, coordinating an increasingly centralized (and well-armed) network of community-based defense organizations.

### Selective Incentives

Critiquing decades of scholarship that highlighted the centrality of grievance (or other shared interests) in ex-

plaining collective action, Mancur Olson (1965) observed that common interests are not sufficient to motivate participation. When successful, revolutionary mobilization produces public goods. If enjoyment of these benefits is not contingent on participation, he argues, rational, self-interested individuals will not bear the costs of acting and will instead free ride on the willingness of others to participate. Olson's formulation turned the literature on participation on its head: instead of assessing the depth of grievances held by particular classes and ethnic groups, the question became why anyone chooses to rebel at all.

Recognizing that collective action is often observed in practice, Olson offered an explanation for why some individuals choose to participate and take on unnecessary costs. He introduced the idea of selective incentives—inducements to participation that are private and can be made available on a selective basis. Samuel Popkin applied this perspective to the study of rebellion in Vietnam, arguing that a crucial revolutionary strategy was to offer incentives (in the form of material benefits) to peasants contingent on their participation (Popkin 1979). More recently, Mark Lichbach catalogued examples of how selective incentives operate in a wide variety of contexts, from organized and unorganized rural protests to strikes, riots, and rebellion (Lichbach 1995). He identified a range of possible private goods that might be offered to recruits, from money, loot, and land, to positions of authority. Acceptance of the role of selective incentives in motivating participation is now widespread, leading Jeffrey Goodwin and Theda Skocpol to conclude that “it is the on-going provision of such collective and selective goods, not ideological conversion in the abstract, that has played the principal role in solidifying social support for guerrilla armies” (1989, 494).

While much of this literature emphasizes the positive incentives that can be given to individuals who participate (“pull” factors), the theory only requires that the private benefits of joining outweigh the private benefits of *not* joining. Thus Azam's study of recruitment emphasizes not only the wages paid to fighters, but also the impact of rebellion on the wages of those who choose to remain as farmers (Azam 2006). In an environment of conflict, a key determinant of welfare for nonparticipants is the level of violence they will have to endure. Thus protection from violence (a “push” factor) may be a key private benefit that fighting groups offer. Indeed, joining a military faction may be the most important strategy individuals use to avoid the violence perpetrated by the opposing side(s) (Goodwin 2001; Kalyvas and Kocher 2007; Mason and Krane 1989).

Although a number of the determinants of the efficacy of selective incentives (for example, poverty which

may indicate a relatively high marginal return to benefits) are consistent with rival explanations for participation, some distinct hypotheses can be identified. In particular, individuals are more likely to participate in rebellion if:

- H4:* They expect to receive selective incentives from the fighting group.
- H5:* They believe they would be safer inside a fighting faction than outside of it.

A selective incentives story is equally plausible as an explanation for participation in counterinsurgent mobilization. To the extent that rebel groups attack villages or threaten the status quo, all villagers would benefit from locally organized resistance that protects against rebel attacks. But participation in such activities is risky and costly. Selective incentives—whether positive or negative—potentially play an important role in helping leaders to mobilize individuals for high-risk collective action to fight *against* insurgent movements.

It is worth noting that Olson offered a second explanation for the extent of observed participation in collective action—one that has received far less exploration in the literature on mobilization for war. *Coercion*, he argued, could resolve the free-rider problem that undermines the capacity for collective action. This argument is especially germane in the context of civil wars (Gates 2002), a point we return to in the discussion of our results.

Debates about participation in Sierra Leone's civil war also speak to this Olsonian logic of participation. Arguing against a focus on the mobilization of discontent, some have proposed that insofar as the RUF was successful in gaining recruits, this was due to its willingness to engage the "wrong kind individuals." Ibrahim Abdullah (1998) argues that when the student movement disintegrated, the locus of revolution shifted from the campus to the streets and slums of Freetown. Unlettered, unemployed migrants formed the basis for Sierra Leone's insurgency in part because they were "cheap." The RUF's position of dominance in the eastern districts enabled it to extract resources from the mining and trade of diamonds, the monitoring and taxing of trade across the border, and the looting of household property. These material rewards, alongside coercive tactics, Abdullah suggests, generally explain the decisions of those who joined the insurgency.

Selective incentives may have figured prominently in the organization of the CDF as well. Chiefs mobilized financial support for the local defense militias through levies on the population. As one civilian commented, "villagers were paying [contributions], the whole of Kono District . . . it was compulsory—if you don't pay you go to court . . . they were raising a lot of money" (Keen 2005,

148). In some cases at least, these levies may have been used to reward CDF fighters, although there were also accusations that CDF militias, and chiefs in particular, misappropriated these levies for personal gain. In areas where diamond extraction was possible, there is evidence too that CDF forces engaged in the minerals trade, providing additional material resources for CDF fighters (Truth and Reconciliation Commission 2004, Vol. 3b).

## Social Sanctions

A third school of thought links an individual's decision to participate to the characteristics of the community in which he or she is embedded. According to this approach an analysis that focuses only on private gains from membership without accounting for community-level features is incomplete. Strong communities that can monitor individual behavior and bring to bear a variety of social sanctions are essential for overcoming the free-rider problem that can limit participation in rebellion. For Michael Taylor, a prominent proponent of this argument, a strong community is defined by (1) a membership with shared values and beliefs; (2) relations between members which are direct and many sided; and (3) practices within the community of generalized reciprocity (Taylor 1988). He suggests that variation in these characteristics will help one understand a community's potential for collective action.<sup>7</sup>

Taylor applies his argument in a reanalysis of Skocpol's cases of social revolution. He argues that the speed with which widespread rebellion unfolded in France and Russia, as compared to China, is directly attributable to the strength of their peasant communities, their autonomy from outside control, and their preexisting networks which facilitated collective action. In France, for example, Taylor identifies the rural economic system as the foundation of community strength. The situation of peasants in China was much different. Embedded in a larger economic system of interlinked villages and towns, peasants operated more independently and high degrees of mobility undermined the creation of dense ties and shared norms. As a result, preexisting communities could not provide the basis for revolution in China.

<sup>7</sup>Norms of reciprocity are not the only mechanism through which "strong" communities might shape individual decisions about participation. Roger Petersen (2001), for example, shows how different facets of community structure prove instrumental in motivating and sustaining participation in civil war. In particular, he shows that strong communities not only allow for social sanctions, but also provide information about the preferences of one's neighbors, making it possible for individuals to coordinate on resistance.

The importance of preexisting social networks and shared collective identities was not lost on earlier scholars of revolution. Indeed, Barrington Moore identified the presence of strong horizontal networks within peasant communities as a necessary condition for mobilization (Moore 1966). James Scott argued that cohesive villages with strong communal traditions were in a much better position to act on their moral outrage over the subsistence crisis (Scott 1976). Even Theda Skocpol, whose work drew attention to the impact of declining state strength on revolution, pointed to the role of autonomous peasant communities with considerable solidarity as the engine of mobilization (Skocpol 1979). The community perspective suggests a number of additional hypotheses. Individuals are more likely to participate in rebellion if:

*H6:* Members of their community are active in the movement.

*H7:* Their community is characterized by strong social structures.

As with selective incentives, arguments about the efficacy of social sanctions for motivating high-risk collective action apply as concretely to situations of counterinsurgent mobilization as to rebellion itself. Leaders who wish to mobilize individuals to take enormous risks to prevent the rebellion from succeeding benefit also from the existence of dense communities with shared values and beliefs, as norms of generalized reciprocity are powerful inducements to individual participation. Of course, the ultimate impact of community cohesion likely depends on whether participation is in some sense in the community's interest—a point we return to below.

Stories about the importance of social sanctions figure prominently in the literature on mobilization for the war in Sierra Leone, although they have been advanced principally to explain participation in the counterinsurgent groups. Patrick Muana describes the characteristics of the Kamajoi militia:

These fighters are conscripted with the approval and consent of the traditional authority figures, maintained and commanded by officers loyal to those chiefs. This ensures a high level of commitment on their part and an insurance against atrocities on the civilian population on whom they rely for sustenance, legitimacy, and support. (1997, 88)

Organized by chiefs who in some areas rose to greater prominence with the disappearance of central authority, CDF militias emerged from within preexisting commu-

nities and relied on social sanctions to promote participation and maintain discipline.

Though commonly offered as a general explanation for successful revolutionary mobilization, arguments about the power of community norms to motivate participation have rarely been used to describe the rise of the RUF. We have encountered only one reference to a role for preexisting community structures in the formation of the RUF—this is the case of the “Joso Group,” a civil militia that was active in the Ndogboyosoi conflict against the APC government years before the war began. In 1991, members of this unit joined the RUF collectively and added 17 men to the RUF's Southern Front (TRC 2004). Beyond this instance, commentators have emphasized the *absence* of ties that existed between the RUF and the communities from which it mobilized recruits (Gberie 2005). Because of the powerful impact of social sanctions on revolutionary mobilization observed in other contexts, we nonetheless look for evidence that community characteristics predict participation in the RUF as well.

## Data and Research Design

Testing hypotheses about the determinants of participation in civil war requires systematic data on the characteristics of combatants and noncombatants. Given the difficulty of gathering data in war-torn countries, previous approaches have employed ethnographic data and qualitative information—gathered largely from combatants—to draw inferences about the factors explaining mobilization. This article instead draws on a dataset that allows for the assessment of competing hypotheses using information gathered from both excombatants and noncombatants in postwar Sierra Leone.

### The Survey

The survey was conducted between June and August 2003, slightly more than a year after the war came to an end. The main method for gathering information was through the administration of a closed-ended questionnaire to 1,043 respondents by an enumerator in the respondent's local language.

To ensure as representative a sample as possible, the survey employed a number of levels of randomization. First, teams enumerated surveys in geographic locations and chiefdoms that were randomly selected. Estimates of the population of excombatants presently residing in the chiefdoms were made based on data from the National Commission on Demobilization, Disarmament,



and Reintegration (NCDDR) and the National Statistics Office. These estimates were used to draw 63 clusters of 17 subjects throughout the country with the expected number of clusters (and thus excombatants) proportional to the estimated excombatant population in each chiefdom. These clusters fell within 45 chiefdoms or urban localities which formed the basic enumeration units.

At each site, enumerators worked through multiple sources—town or village chiefs, village youth coordinators, DDR and NCDDR skills training centers—to develop lists of excombatants. Compilers of the lists were encouraged to ensure as broad a group as possible and urged not to exclude individuals based on faction, rank, gender, age, rurality, or education. In every case, teams aimed to identify two to three times the targeted number of potential respondents and then to randomly select respondents from this pool.

This sampling strategy ensures that the national geographic spread is representative (conditional on the quality of our frame) and that those selected are representative of local lists, but it does not guarantee that local lists are themselves representative of local populations. This is one of the key challenges to the representativeness of our sample.<sup>8</sup> Biases that may be introduced from the process of local list generation are difficult to assess, but it is plausible that excombatants who were relatively poorly politically connected and those from the most remote areas (within chiefdoms) are underrepresented, biasing us against finding poverty or remoteness as predictors of participation. It is also possible that our sample is more likely to include individuals who remain tightly connected to the factions, biasing us toward finding support for proxies of social ties.

<sup>8</sup>Other possible sources of nonrepresentativeness are worth noting. Perhaps most obviously, we were unable to sample excombatants who died during the war. We were also unable to survey combatants who elected to join insurgent groups in neighboring Liberia, a number estimated to be one thousand or more. Finally, it is likely that combatants who participated at the earliest stages of the war and then dropped out, choosing not to participate in the DDR process, were undersampled. The directions of bias introduced by these imperfections in our sampling strategy are difficult to assess. Those who died may have been the most aggressive fighters, motivated by a commitment to the cause or a desire for wealth, or the weakest, brought on board by coercion. There is some evidence in the data that fighters who were injured most often were also more likely to have been recruited via offers of material gains, suggesting that those who passed away may not have been the weakest soldiers (on most correlates there is no difference between those who got injured and those who did not). Those who fled to Liberia are likely to have been more motivated by personal and political factors. Many who dropped out could have been abductees, but dropouts may also include early joiners who cared most about the cause initially. These are, at best, guesses about the direction of the bias; as such, our results should be assessed with the limitations of our sampling strategy in mind.

## Sampling Noncombatants

Because data on nonparticipants are essential for isolating the causal factors explaining mobilization, the survey team identified noncombatants in each selected cluster as well. Noncombatants were sampled in proportion to the number of excombatants targeted in each cluster, yielding an overall sample of 184 from the same 45 chiefdoms and urban localities (just short of the 204 targeted). Enumerators identified a central location in each of the 45 selected chiefdoms, selected a random direction, and sampled every third household or business, randomly selecting an individual within this household or business to be surveyed. This method, though very easy for our teams to implement, is imperfect. Most evidently, by using a short fixed interval rather than an interval based on the population of the enumeration site, the method is likely to overrepresent individuals in relatively central locations and underrepresent individuals working in fields or in transit.<sup>9</sup> As is clear from our summary statistics, for example, the noncombatant group overrepresents men (65% male representation) relative to the general population.

There are other advantages and disadvantages to the sampling strategy employed for noncombatants. Enumerating nonparticipants only in chiefdoms where clusters of excombatants were drawn makes a great deal of sense on efficiency grounds, as the combination of poor road transport and Sierra Leone's heavy rainy season would have rendered infeasible an entirely separate sampling strategy for the noncombatant population. At the same time, to the extent that excombatants returned to their home communities after the war (our estimates suggest that more than half did), our sampling strategy yields a set of noncombatants in the same set of communities from which the combatants joined, allowing us to better identify individual-level determinants of mobilization. The disadvantage is that, while our excombatant survey provides a nationally representative sample, our noncombatant survey does not. Therefore, appropriate weighting is required to correct the biases in our sample frame. This weighting plays two roles, accounting first for the fact that while our sample includes disproportionately more excombatants than noncombatants, but also for the fact that the weights for noncombatants are not uniform across chiefdoms and instead reflect the distribution of excombatants.<sup>10</sup>

<sup>9</sup>We say "relatively central" locations because our chiefdom-level randomization ensured that survey teams went to extremely remote areas, including sites inaccessible by car. In some instances, accessing "central" areas within chiefdoms meant building bridges and, in one case, constructing a raft to cross a flooding river.

<sup>10</sup>We calculated the probability with which a civilian subject was chosen as follows. Outside of Freetown, we randomly selected

As with combatants, the main method for gathering information was through the administration of a closed-ended questionnaire by an enumerator in the respondent's local language. The questionnaire mirrored that given to combatants, although sections covering an individual's war experience (as a combatant) were excluded and questions regarding contacts with the group that combatants joined were asked of noncombatants with respect to those groups with which they had most frequent contact.

### Empirical Strategy

To test our hypotheses, we present a model to predict the likelihood that individuals joined a fighting group during the war in Sierra Leone. Our comparison group is the full set of noncombatants, many of whom (about 40%) were approached directly by combatant groups and elected not to participate. We begin our analysis by focusing on the main rebel group, the RUF, and later return to examine the main civil defense group, the CDF. Together, fighters in these groups account for nearly 90% of the sample.<sup>11</sup> Using a logistic model, we focus first on overall determinants of participation in rebellion by examining the factors that distinguish those who joined the RUF from the pool of noncombatants. Then, recognizing that abduction was a common part of the recruitment experience into the RUF, we use a multinomial probit model to explore separately the characteristics of those who joined voluntarily and those who were forcibly recruited. Finally,

$m$  clusters of  $s$  combatants each; each cluster had probability  $w_j$  of lying in chiefdom  $j$  where  $w_j$  is the share of all combatants in chiefdom  $j$  according to our sampling frame. Hence, for each chiefdom there is a given probability that 0, 1, 2, . . .  $m$  clusters would be selected. Civilians were sampled in the same areas as excombatants at a ratio of 1:5. Letting  $n_j$  denote the number of civilians at a site we have that if  $q$  clusters were selected in a given site, then a civilian at this site would have a  $\frac{q \times s}{n_j} \frac{1}{5}$  probability of being selected. The probability that a civilian is selected then depends directly on the number of excombatants in his chiefdom and is given by  $p_j^{civ} = \sum_{q=0}^m \frac{m!}{q!(m-q)!} w_j^q (1 - w_j)^{m-q} \frac{q \times s}{n_j} \frac{1}{5}$ ; the corresponding weight is  $1/p_j^{civ}$ . For Freetown, the probability is given simply by  $\frac{s_{Freetown}}{n_{Freetown}} \frac{1}{5}$ . Conditional upon the reliability of our frame, the sampling probability for excombatants is given by 1,043/80,000. Because the probability of selecting a civilian respondent in chiefdoms in which there were no reported excombatants is 0, the control group reflects the set of individuals living in chiefdoms in which excombatants are present. It is also worth noting that the weights have not been adjusted to reflect observations that fall out due to missing data in each specification.

<sup>11</sup>We exclude participants in the other three factions for two reasons. First, recruits into the SLA and AFRC were generally conscripted through traditional channels—they were paid members of a national army. Second, because these factions were so small relative to the other two, we have very small sample sizes for these factions, making us more cautious in drawing conclusions about the characteristics of their recruits.

we explore the power of the hypotheses to explain participation in counterinsurgent mobilization. In each model, we enter measures intended to capture each of the core hypotheses alongside a set of control variables which include demographic measures (age, age-squared, gender), occupation (student, farmer), and regional information (a dummy for Freetown and a district-level measure of infant mortality). In all analyses, we enter weights for our observations as described above and cluster disturbance terms by chiefdom (our primary sampling unit).

### Determinants of Participation in Rebellion

We begin with the question of what distinguishes those who participate in rebellion from those who remain on the sidelines of civil war. Our dependent variable, *Join the RUF*, takes a value of 2 if an individual voluntarily joined the RUF and a value of 1 if he or she was abducted into the movement. It takes a value of 0 if he or she did not join any faction.

In evaluating the results that follow, it is critical to keep in mind that voluntary joiners constituted only 12% of total RUF recruits in our sample. Because abduction is self-reported, it is possible that this is an overestimate of the actual rate of abduction. But qualitative evidence suggests that the vast majority of RUF combatants were abducted, with grievances, selective incentives, and social sanctions rendered less important in the individual decision about whether to join (Gberie 2005; Keen 2005). Including abductees in the analysis, however, does allow for a more complete treatment of RUF recruitment. To explore the power of different explanations for understanding who joined voluntarily and who was conscripted, Table 2 reports results both for a pooled (treating abductees and volunteers as a single category) and a disaggregated analysis of RUF membership.

### Grievances and Participation

Our first hypothesis is that individuals are more likely to join a rebellion if they suffer from economic deprivation.<sup>12</sup> The United Nations Development Program, in constructing its human development index, emphasizes

<sup>12</sup>We focus here on objective measures of economic deprivation. Gurr (1970), however, focuses on subjective deprivation (the gap between expectations and experience), which may or may not correlate with actual deprivation. Without data on participants' perceptions of their own well-being, we are not in a position to precisely evaluate Gurr's hypothesis.

TABLE 2 Determinants of Participation in Rebellion

Model	I: RUF	II: RUF		II: CDF
	Logit	Multinomial Probit		Logit
	All	Abductees	Volunteers	Volunteers
<b>GRIEVANCES</b>				
H <sub>1</sub> Mud Walls	0.92 [0.41]**	0.50 [0.22]**	0.57 [0.26]**	1.61 [0.56]***
H <sub>1</sub> Lack of Access to Education: (More than primary 0, Primary 1, No primary 2)	1.09 [0.30]***	0.61 [0.15]***	0.40 [0.18]**	0.80 [0.30]***
H <sub>2</sub> Supports the SLPP	-0.49 [0.67]	-0.23 [0.33]	-0.90 [0.30]***	-0.58 [0.58]
H <sub>2</sub> Mende	2.16 [0.88]**	1.09 [0.42]***	0.60 [0.450]	0.58 [0.65]
H <sub>3</sub> Does Not Support Any Party	1.29 [0.57]**	0.50 [0.25]**	0.62 [0.24]**	1.62 [0.51]***
<b>SELECTIVE INCENTIVES</b>				
H <sub>4</sub> Offered Money to Join	1.77 [0.58]***	1.01 [0.43]**	0.78 [0.46]*	3.19 [0.65]***
H <sub>5</sub> Felt Safer Inside Group	-0.56 [0.37]	-0.51 [0.15]***	0.99 [0.212]***	2.34 [0.30]***
<b>COMMUNITY COHESION</b>				
H <sub>6</sub> Friends as Members of Group	0.25 [0.90]	-3.10 [0.68]***	3.09 [0.44]***	0.60 [0.50]
H <sub>7</sub> Villages Accessible by Foot or Boat Only	-0.01 [0.02]	-0.002 [0.01]	0.003 [0.01]	0.03 [0.01]**
<b>CONTROLS</b>				
Farmer	0.32 [0.56]	0.26 [0.34]	-0.64 [0.39]*	1.39 [0.47]***
Student	0.83 [0.55]	0.38 [0.27]	0.44 [0.28]	1.26 [0.56]**
Male	2.44 [0.64]***	1.05 [0.31]***	1.26 [0.32]***	4.06 [0.90]***
Age	1.03 [1.21]	0.03 [0.57]	2.57 [0.68]***	3.52 [1.22]***
Age-squared	-0.2 [0.16]	-0.047 [0.07]	-0.30 [0.09]***	-0.46 [0.15]***
Freetown	-0.16 [0.73]	-0.052 [0.35]	-0.87 [0.38]**	0.55 [0.83]
Infant Mortality	13.52 [6.75]*	5.125 [5.14]	9.82 [4.12]**	16.85 [6.07]***
Constant	-12.48 [3.16]***	-5.50 [1.64]***	-15.29 [1.60]***	-26.74 [3.45]***
Observations	515		515	689

Notes: Standard errors in brackets. \*Significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%.

two measures of deprivation that are readily operationalized at the individual level: income and education.<sup>13</sup> We proxy for income with a measure, *Mud Walls*, that captures material well-being, recording the material used in the construction of walls for an individual's house. If they are constructed from mud, among the cheapest but least durable form of wall design used in Sierra Leone, this variable takes a value of 1. Alternatives include burnt brick and cement constructions. Our second measure, *Lack of Education*, records the level of schooling completed by an individual. This variable takes the value of 0 if postprimary education was achieved, 1 if only primary education was completed, and 2 if the individual received no formal education at all.

We find that both wealth and education predict membership in the RUF. The estimated effect of poverty is statistically significant and sizeable, with an increase from 0 to 1 associated with an increase in participation risks of a factor of 1.7 (95% c.i.: [0.13 – 4.60]).<sup>14</sup> The effect associated with a lack of access to education is stronger, with a change from 0 to 2 on our score associated with an approximately ninefold increase in the probability of participation in the RUF (95% c.i.: [1.7 – 26.5]). When we disaggregate, we find that these effects are qualitatively similar (and significant) across voluntary and involuntary recruits though quantitatively stronger for abductees.<sup>15</sup> These disaggregated effects are illustrated in Figure 1, which provides a graphical representation of first differences from the multinomial probit model.

To proxy for political exclusion experienced by individuals in the prewar period, we use a measure of support for the major excluded political party, the SLPP. Since the beginning of the postcolonial period, many accounts of political dynamics in Sierra Leone emphasize the shifts in power from control by SLPP supporters to APC supporters and back again (Kandeh 1992). One common, if unsubstantiated, view of the origins of the war suggests that the violence was an attempt to regain power by supporters of the SLPP. Closely related to SLPP support in the political history of Sierra Leone is membership of the Mende ethnic group. Though SLPP membership has been

historically associated with the Mende, there are many non-Mende SLPP supporters and many Mende who do not support the SLPP. In order to capture the independent effects of political and ethnic exclusion, we include a dummy variable for Mende in our analysis. The results in Table 2 provide no evidence that politically excluded SLPP members were likely to join the rebellion; indeed, there is support for the opposite claim that SLPP members were less likely to volunteer for the RUF. This is consistent with the progression of the war in which ultimately the SLPP became more closely associated with the CDF. The weight of the evidence suggests that, even though SLPP supporters were politically excluded until 1996, they were no more likely to join the RUF than backers of other parties.<sup>16</sup> Similarly we find that although the Mende, the more politically excluded of Sierra Leone's major groups, were well represented in the RUF, this was uniquely through the abducted membership rather than the cohort of volunteers.<sup>17</sup>

Turning to the third hypothesis, it may not matter that individuals are on the losing side politically, but that they may not feel represented by *any* party on the political stage. In our survey, we asked respondents which party they supported before the war.<sup>18</sup> One-third of non-combatants claimed to have supported no party at all; among RUF combatants, just over 60% did not back a particular political party. Consistent with qualitative accounts emphasizing the disenfranchised youth who made up the ranks of the RUF, we find evidence of a relationship between alienation from the political system, *Does Not Support Any Party*, and recruitment into the RUF, even after controlling for age. Individuals who did not support any party were two to three times more likely to join both through abduction and voluntary induction.

## Selective Incentives

Our first measure of selective incentives, *Offered Money to Join*, records whether individuals were offered material rewards (money or diamonds) in exchange for their partici-

<sup>13</sup>Without measures of access to land, income, and patterns of wealth over time, we are not in a position to test precisely some of the theories advanced earlier. We are confident, however, that education and home construction variables offer fairly good proxies for household economic status. Both have been used consistently in analyses of poverty in Africa.

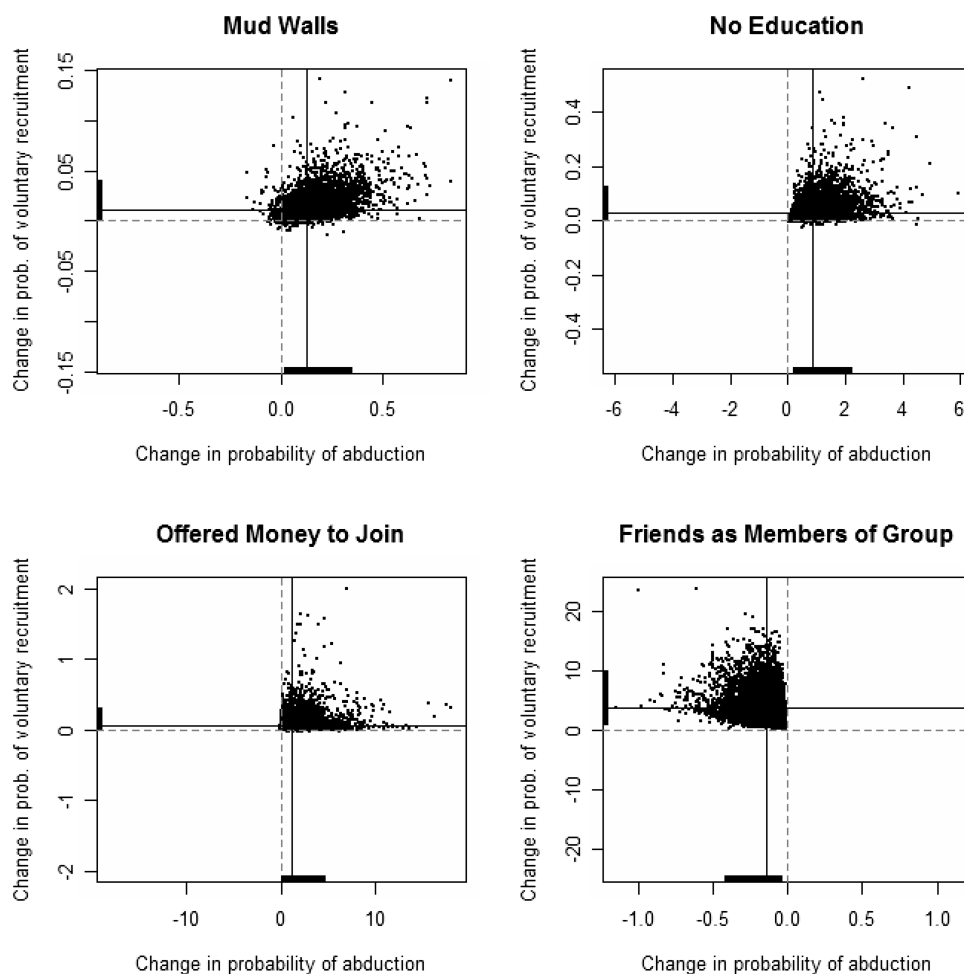
<sup>14</sup>This, and other marginal effects, are reported for the case in which all other variables are held at their means.

<sup>15</sup>The fact that voluntary recruits to the RUF exhibit higher educational attainment than abductees is consistent with qualitative accounts that emphasize the urban and peri-urban roots of the RUF's initial membership.

<sup>16</sup>This effect remains negative and significant even when the sample is restricted to those who joined the RUF before 1996, when the SLPP gained political power again in Sierra Leone.

<sup>17</sup>This likely reflects the fact that RUF operations were largely concentrated, especially in early stages, close to diamond resources and in Mende strongholds.

<sup>18</sup>Political alienation is only one of many reasons why individuals may not join a political party. Alternative measures of alienation might include attitudes toward the government or patterns of voting and participation, but questions allowing us to measure these attitudes and behaviors were not included in the survey. Given arguments in the literature on Sierra Leone about the disenchantment of youth with the parties before the war began, we believe that the lack of support for a party is an appropriate indicator.

**FIGURE 1** Marginal Effects for RUF Recruitment

*Notes:* Each figure shows 10,000 simulated first differences (in percentage points) in the probability of abduction and the probability of voluntary recruitment. For the case of “Mud Walls,” “Money,” and “Friends,” the differences correspond to a shift in the independent variable from 0 to 1 with all other variables held constant at their means; for the case of “Education,” the differences correspond to a shift from 0 (secondary or more) to 2 (no formal education). The dotted lines show the null (of zero effect) for each outcome and the solid lines show the average estimated effect. 95% confidence intervals for each dimension are marked on the axes with thick black lines.

pation. The variable employs data from a survey question that asked respondents what they were told they would receive upon joining a fighting group. For combatants, this question referred to the group they eventually joined.<sup>19</sup> In the case of noncombatants, the question focuses on the groups with which individuals had most frequent contact. In this analysis, our measure records answers with respect to offers made to civilians by the RUF, conditional upon the RUF having attempted to recruit them. All nonjoin-

<sup>19</sup>It is possible, therefore, that individuals were offered material incentives to join the CDF, for example, but subsequently joined the RUF without an offer of material incentives. In this case the individual would be classified here as a joiner of the RUF but *not* as one who was offered material incentives to join.

ers who had most frequent contact with non-RUF groups or who were not approached by the RUF are classified here as if they were not offered material incentives by the RUF. Our results suggest that material offers make participation in rebellion more likely; but surprisingly the marginal effect is just as strong (indeed, stronger) for abductees as compared to voluntary recruits (Figure 1). For both abductees and volunteers, approximately 1 in 5 individuals claimed that they were offered money by the RUF, compared to 1 in 10 civilians. This feature of our data highlights the ambiguity of the notion of abduction found also in personal testimonies (Beah 2006): carrots and sticks may be used simultaneously. Quantitatively, these results suggest that individuals offered money or

diamonds were six times more likely to participate in the RUF.

A more asymmetric effect of incentives on volunteers and abductees is in evidence for “push” factors. To study the extent to which protection offered by fighting factions might serve to motivate participation, we used a proxy, *Felt Safer Inside*, that draws on a survey question that elicited the respondents’ assessment (during the war) of whether they felt that “life would be safer” inside or outside of the group.<sup>20</sup> For those who joined, the response was given with respect to the time at which they joined. Those who did not join answered the question with respect to the moment in which they had the most frequent contact with the RUF.<sup>21</sup> Table 2 suggests that the relationship between personal security and the decision to join a rebellion is strongly significant at conventional levels, even after controlling for a range of other factors, and is substantively large. The possibility of improving one’s personal security, it appears, provides an important motivation for joining a faction in times of war. As may be expected (but contrary to the finding on material incentives), the effect works in just the opposite direction for abductees.

### Social Sanctions

Hypothesis 6 suggests that when individuals have community ties that link them to members of a fighting group, they are more likely to join. To create a measure of social ties, we asked both joiners and nonjoiners how they first encountered an armed group. In the case of combatants, we asked them how they first encountered the group that they ultimately joined; for noncombatants, we asked them how they first came into contact with the group. Our measure takes a value of one if an individual responded that her first contact came when a friend or relative joined the group and zero otherwise.<sup>22</sup> Other possible avenues for making first contact included being approached by the group either peaceably or through an attack on a settlement or an ambush. The measure involves some slippage from the notion of *community* ties that we seek, but

<sup>20</sup>We cannot exclude the possibility that answers to this question reflect a post hoc rationalization on the part of both combatants and noncombatants.

<sup>21</sup>Nonjoiners who had most frequent contact with non-RUF groups are classified here as if they felt neither more nor less safe in their present situation compared with being inside the RUF. These results are, however, robust to the exclusion of this category.

<sup>22</sup>Individuals may have had friends in a given group but not in the one that they eventually joined. In this case, we code these individuals as having joined a group but as not having friends in a group. Again, nonjoiners who didn’t encounter the RUF are coded as not having friends in the RUF.

still captures social connectedness to the fighting group. Across our full sample of noncombatants, 21% reported friends joining as the first connection they had to a group. For RUF combatants, however, this number is just 5%; for abductees, it is 0%; while for voluntary combatants, it is close to 28%. Abductees almost universally first encountered the RUF when their village was attacked or they fell prey to an ambush. For those who joined voluntarily but did not have friends already in the group, the first contact was generally made when they actively sought out the group and asked to join (nearly 20% of the time). Strikingly, we find that while social ties do appear to have facilitated voluntary participation in the RUF, they are associated with a lower likelihood of being abducted (see Figure 1). Possibly such ties serve to shield individuals or communities from recruitment drives or possibly in such cases persuasion is substituted for coercion.

As a test of the final hypothesis, we employ a measure intended to capture the degree to which communities have strong social structures. We lack a direct measure of this characteristic, however, and rely on a proxy that focuses on the isolation of communities. The measure, *Accessible by Foot or Boat Only*, records features of settlements within the chiefdom in which an individual was based.<sup>23</sup> Derived from data made available by the UN Food and Agriculture Organization (FAO), it measures the share of villages in a given chiefdom that can be approached only by foot or by boat. In such villages, we expect to find a low level of social anonymity, a large share of exchange oriented inwards, and a high level of repeated interaction among community members. Such features are likely to be predictive of social cohesion although they by no means guarantee it.<sup>24</sup> Such villages are in fact quite common in Sierra Leone; in more than 50% of chiefdoms, at least one-third of villages are inaccessible by means other than foot or boat. A disadvantage of the fact that this measure is recorded at the chiefdom level is that it cannot be used to exploit the variation within chiefdoms that we observe in our data; the corresponding benefit, however, is that it is immune to biases introduced by imperfections in the within-chiefdom noncombatant sampling. Returning to Table 2, we find no relationship between this measure of isolation and abduction or voluntary recruitment to the

<sup>23</sup>We use chiefdom measures for excombatants and noncombatants at the onset of the war. This measure thus captures background social conditions before violence began. Though some individuals moved during the war before joining, qualitative accounts suggest that prewar community ties often played a role in motivating participation, particularly in the CDF.

<sup>24</sup>We note that the absence of road infrastructure may also be a measure of poor public goods provision and thus, arguably, capture elements of social grievances.

RUF. This nonfinding is consistent with the more qualitative accounts described earlier. Perhaps more surprisingly, isolation did not protect against abduction either: RUF fighters penetrated villages that government services had failed to access throughout the postindependence period.

The results suggest mixed evidence for prevailing theories offered to explain participation in rebellion. All three accounts hold some explanatory power, but not on all measures. Most importantly, however, the vast majority of RUF recruits were abductees. For these individuals, common arguments about expressive motivations, selective incentives, and social sanctions are rendered irrelevant. A grievance account predicts the observed correlation between welfare and membership, but for abductees the interpretation is the wrong one: poverty and alienation cannot reasonably be seen as a source of frustration that motivates political action. In this context, traditional indicators of grievance must represent something other than marginalization; for example, poverty or a lack of access to education might make individuals more vulnerable to manipulation by political or military elites.

For those who elected to join voluntarily, however, the evidence is striking. We find some evidence that social ties were a determining factor for voluntary participation in the RUF. Grievances—as measured by poverty and political alienation, but not by political exclusion or lack of education—also predict participation. But to understand the dynamics of the RUF, one must also focus on the ways in which selective incentives are used to motivate participants. Individuals who claim to have been abducted also claim to have been offered material rewards for participation; for volunteers, these offers are also important as is a belief on the part of combatants that they would be protected from violence if they served the organization rather than fought against it or attempted to remain neutral.

## Comparing Rebellion and Counterinsurgent Mobilization

So far, we have only told half of the story. Most fighters in Sierra Leone's decade-long civil war fought not on the side of the rebels, but instead for a counterinsurgent force of coordinated local defense militias. Like the RUF, leaders of the CDF faced a challenge in motivating individuals to take enormous risks by picking up guns to defend their communities. While much of the literature on participation in civil war focuses expressly on those who join insurgent movements, we have suggested that the three major arguments advanced to explain recruitment also generate predictions about who will take up arms to defend the status quo. Framed as a collective action problem, offers of selective incentives or the threat of social sanctions

should be as effective in motivating counterinsurgent activity as they are believed to be in motivating rebellion. Understood in terms of expressive motivations, however, the predictions are turned on their head: we expect that those who fight to defend the status quo are better off economically and more fully integrated into the existing political regime.

Does participation in civil war follow a single logic or do strategies of mobilization differ across groups? We answer this question by looking at the determinants of participation in the CDF. We construct a dependent variable that takes a value of 1 if an individual joined the CDF voluntarily and 0 if he joined no group (we exclude 11 cases in which individuals claimed to have been abducted into the CDF). By examining CDF recruitment, we can explore the extent to which the patterns of participation we observe in the RUF extend to counterinsurgent mobilization as well. The results of our analysis are presented in the final column of Table 2.

The evidence suggests that participation in civil war does not follow a single logic; differences obtain across the major categories of participation, and in those cases where similar patterns emerge, they challenge our interpretation of previous findings. Strikingly, a number of the patterns observed with respect to volunteers in the RUF hold for CDF recruits as well. The two welfare measures, mud walls and a lack of access to education, both predict membership in the CDF, as does political alienation. Changes in each of these measures, from 0 to 1 in the case of mud walls and alienation and 0 to 2 in the case of education, are associated with an approximately fivefold increase in rates of participation. While consistent with the patterns evident in the RUF, these relationships are *not* consistent with grievance-based accounts of participation. Individual CDF combatants, defending the status quo, appear not to be those most benefiting from the current political regime. In fact, the evidence suggests that individuals of the same social class were mobilized to fight on *both* sides of Sierra Leone's civil war. While it would be difficult to map these economic proxies onto a story of grievances motivating mobilization, the results support arguments that hold that an individual's relative economic position shapes the likelihood with which he or she is mobilized (or conscripted) to fight in a civil war.

The comparison of recruits to the RUF and the CDF reveals some differences as well. Material motivations appear stronger for CDF than for RUF volunteers. For both groups, however, safety appears prominently as an inducement to voluntary participation. Turning to community structures, whereas our proxy for community strength did not correlate with RUF participation, it does relate strongly with CDF membership. This finding is consistent with the argument that CDF recruitment, designed

to defend rather than oppose the status quo, succeeded in drawing on community structures to foster recruits.

### The Interaction of Grievances, Selective Incentives, and Community Pressures

The evidence suggests that, in marked contrast to theoretical debates that advance expressive motivations, selective incentives, and social sanctions as rival theories of mobilization, distinct proxies for each emerge as significant in models predicting who fought in Sierra Leone's civil war. Thus, a natural question to ask is this: to what extent do the different facets emphasized by these scholars really constitute rival models? From a theoretical point of view, it is clearly possible to construct a single comprehensive model that captures all three elements (for an example, see Gates 2002). We can then construct three rival models that incorporate just one of these three elements, and another three models that incorporate two of the three.

Standard approaches for hypothesis testing with nested models allow us to examine *empirically* whether one such model outperforms another. Using Wald and Likelihood ratio tests, we find that in all cases the models based on only one or two of the three arguments (grievances, selective incentives, or social sanctions) can be rejected in favor of the comprehensive model (we can reject the null that the coefficients on the supplementary variables of the comprehensive model are all 0). Participation in Sierra Leone's civil war can best be understood in the context of this diversity of motivations for participation.

However, a deeper analysis is possible. Although we have described these three approaches as rival, there are reasons to expect that these pathways to participation do not operate independently. For example, it may be the case that incentives can be applied with greater efficiency to some people than they can to others. Most obviously, with decreasing marginal returns to income, one might expect that offers of material rewards will be a more effective force for poorer people, *ceteris paribus*. If so, then the grievance and selective incentives stories offer similar predictions regarding who is likely to join. In a similar way, the social sanctions story can help to explain why an individual may take actions that appear privately costly but publicly beneficial. But *which* actions he should take—whether to fight for or against the status quo or to stay on the sidelines—depends not on the strength of those ties but on the preferences of communities, a feature that may be better explained by grievances or the benefits that a community expects to achieve.

In light of these considerations, we explore interactive effects in an effort to parse these stories. We focus specifically on the interaction between welfare measures of grievances and selective incentives (a similar analysis can be undertaken with each of these interacted with measures of community cohesion). A strong grievances story suggests that grievances predict participation even in the absence of selective incentives. A strong selective incentives story suggests that grievances cannot explain participation in the absence of selective incentives, and that selective incentives predict participation even in the absence of grievances.

The results of our analysis, presented in Table 3, suggest a nuanced relationship between these different accounts of participation. Poorer people and less educated individuals are more likely to join all groups in cases in which they are not offered money to join (Panels I and II). Although poverty does continue to predict participation in the CDF after offers are made (as can be seen from the positive coefficient on the interaction term), it does not explain RUF participation in this situation (note the large negative coefficients on the interaction terms for the RUF). In this interactive model, material gains appear to facilitate recruitment even if prospective recruits are less poor; while for the CDF, the impact of monetary offers appears to work independent of wealth levels, the coefficient on the interaction term for the RUF outcomes suggests that poverty and monetary offers work as substitutes and not as complements. A similar story holds for education (Panel II), where we see that less educated individuals are more likely to join all groups when funding is not on offer, but this effect is weakened (in the case of abductees) or disappears outright (in the case of RUF voluntary recruits) once offers of material gains are made.

Turning to “push” factors, the results suggest that safety concerns motivate voluntary participation in the absence of grievances and are no more (or less) motivating in the presence of grievances (Panel III). In this respect, safety concerns “matter” independent of grievances. The impact of poverty remains positive in the absence of safety motivations, but significance is lost on this measure in this model. More consistent results appear for the education measure (Panel IV). This model confirms that less educated individuals are more likely to participate but that this effect is somewhat attenuated in the presence of safety concerns, suggesting again a substitution effect.

Overall, the interactive effects suggest that grievance motivations operate independently of motivations driven by selective incentives. Thus, the analysis suggests that proxies for grievances do not simply capture the ease with which selective incentives can be applied, nor are selective incentives effective only for the aggrieved.



TABLE 3 Interactive Effects

	I			III			
	RUF Abductees	RUF Volunteers	CDF Volunteers	RUF Abductees	RUF Volunteers	CDF Volunteers	
Mud	0.62 [0.23]***	0.68 [0.25]***	1.58 [0.62]**	Mud	0.85 [0.71]	0.53 [0.76]	1.85 [1.48]
Money	2.03 [0.72]***	2.14 [0.79]***	3.03 [1.04]***	Safety	-0.35 [0.29]	0.97 [0.34]***	2.41 [0.63]***
Interaction	-1.40 [0.83]*	-1.64 [0.88]*	0.32 [1.46]	Interaction	-0.23 [0.41]	-0.01 [0.32]	-0.10 [0.70]
	II			IV			
	RUF Abductees	RUF Volunteers	CDF Volunteers	RUF Abductees	RUF Volunteers	CDF Volunteers	
Lack of Education	0.63 [0.13]***	0.45 [0.19]**	0.77 [0.30]**	Lack of Education	1.63 [0.45]***	0.82 [0.48]*	2.64 [0.88]***
Money	1.17 [0.49]**	1.48 [0.67]**	2.10 [0.92]**	Safety	-0.01 [0.16]	1.16 [0.24]***	3.09 [0.52]***
Interaction	-0.19 [0.31]	-0.78 [0.52]	1.53 [0.93]	Interaction	-0.68 [0.21]***	-0.23 [0.23]	-0.76 [0.35]**

Notes: Standard errors in brackets. \*significant at 10%; \*\*significant at 5%; \*\*\*significant at 1%. Abductee and RUF volunteer coefficients derive from a single multinomial probit model; CDF volunteer results derive from a logit model. Except for interaction terms, all controls and specifications are identical to those shown in Table 2.

## Discussion and Conclusion

Statistical evidence from Sierra Leone's civil war offers support to three major literatures that seek to account for revolutionary mobilization. While political motivations, as proxied by support for opposition parties and membership of the Mende ethnic group, do not appear as prominent motivations, participation in a military faction does depend on an individual's relative social and economic position, the costs and benefits of joining, and the social pressures that emanate from friends and community members. While these arguments are often presented as rival, multiple logics of participation do coexist within the same conflict.

At the same time, our empirical results challenge conventional accounts of participation that emphasize grievances. While proxies for standard grievance explanations receive support in our study of those who rebel, we find that the same indicators—poverty, a lack of access to education, and political alienation—also predict the decision to *defend* the status quo. Moreover, these factors also distinguish those who are abducted into a fighting force from those who remain on the sidelines. Conventional interpretations of welfare measures which emphasize the individual and group frustrations that drive participation

in violence are thus called into question. Individual characteristics that observers may readily take to be indicators of frustration with the state may instead proxy for features such as a greater vulnerability to political manipulation by political and military elites, a greater frustration with more peaceful forms of protest, or most simply, a lack of other options.

Our work suggests as well that involuntary participation is a fundamental part of revolutionary mobilization and political violence. Although this fact is already well appreciated by scholars of the Sierra Leone conflict, traditional theories of mobilization within political science make little mention of coerced participation. Understanding why groups abduct recruits and the implications of such a strategy for the dynamics of the war is an open research question, but one that can no longer be ignored in traditional debates about why people join.

Admittedly, these empirical observations emerge from an analysis of a single case. Yet in terms of its duration, the scale of its combatant organizations, and the scope of violence, the war in Sierra Leone is not unlike other recent conflicts that have engulfed countries in the developing world. Whether the specific membership patterns we highlight here are evident in other cases is an

empirical question; nonetheless, the distinct mobilization processes we describe, and attempt to parse, are general.

Given the powerful evidence for multiple paths to participation in Sierra Leone, we believe that the debate now needs to shift from battles over the supremacy of particular theories to a concerted analysis of the conditions under which distinct strategies of recruitment are pursued by different groups at different times. Gates (2002) provides an example of the way forward, incorporating a diversity of recruitment strategies into a single model of mobilization. Our empirical results suggest that both the supply side and the demand side of the labor market for fighters depend on strategic concerns. Needed is a theory not just of when collective action succeeds but a more complete model of the market for the supply and demand of fighters in a context where employers have both wages and violence at their disposal.

Our results also offer lessons about the methodological challenges involved in gathering and analyzing data from excombatants. Despite the emergence of a rich research agenda on civil wars in the last decade, there have been few attempts to bring quantitative empirical inference directly to bear on the study of participation in civil war (Arjona and Kalyvas 2006 and Verwimp 2005 are important exceptions). The greatest challenge is undoubtedly the difficulty of obtaining reliable data. Our strategy has been to go directly to participants in violence. Excombatant surveys put scholars in a better position to subject their theories to rigorous empirical analysis and to explore their underlying assumptions. But they bring unique methodological challenges as well.

Some of these relate to modeling decisions. We are conscious that our conclusions derive from statistical models that depend on many assumptions—assumptions regarding the right set of control variables, the appropriate weighting of cases, and the relevant set of cases to include in the noncombatant population. We have subjected our empirical analysis to a series of robustness checks that alter the specifications and the weightings used.<sup>25</sup> The findings are encouraging. Our measures of material well-being, political alienation, and perceptions of safety continue to correlate with recruitment into both factions, while social ties predict RUF participation and our proxy for community cohesion predicts CDF recruitment across all specifications.

There are also challenges inherent in data of this form. Some of these are difficult to avoid and have already been highlighted above—there may be reporting biases, mem-

ories can be colored, and sampling frames are imperfect. Others can more readily be improved upon in future empirical work. There is, for example, considerable scope for the refinement of measures and the precision of our estimates would have been greater with a larger noncombatant sample drawn using a civilian rather than an excombatant frame. But there are two other, less obvious weaknesses which, if addressed in subsequent research, will markedly improve our ability to understand processes of revolutionary and counterrevolutionary mobilization.

While we collected data for each individual with respect to only one group, the process of mobilization should be conceptualized (for individuals) as a choice from a menu. Because many military factions participate in a single conflict, it makes sense to think about the collection of data in terms of dyads: individual  $i$  and group  $A, B,$  and  $C$ . Data are needed to capture individual assessments of the relative benefits and costs of joining (or not joining) each possible group. In our data, this concern is most evident in the proxies we use to capture offers of material gains, perceptions of safety, and social ties to combatant groups. Without data on dyadic interactions, we were forced to impute missing values and assume that those who did not encounter a group did not have friends in it, receive offers, or perceive it as safer. This risks introducing bias in our estimates, increasing the likelihood in some cases that we reject the null.<sup>26</sup> Perceptions of the relative benefits and costs of participation in each group could in principle be collected in future surveys of this form.

In addition, although the models we test here are static in nature, a growing theoretical literature recognizes that the determinants of mobilization vary over time. Motivating people to participate when the returns are uncertain and the risks high is a particularly difficult challenge for armed groups. Kuran (1989, 1991), Lohmann (1993), and Van Belle (1996) suggest that temporal dynamics are crucial for understanding recruitment: the conditions for joining late in a revolution may be considerably less onerous than those for joining early on. In principle, data such as that examined here can be turned into a “quasi-panel” to partly address questions about how recruitment strategies evolve over time, but a systematic test of these approaches requires rich historical information about individuals’ contacts with and attitudes towards different factions at multiple points in time. If collected retrospectively, data of this sort may place considerable strain on the memory of respondents, but temporal dynamics cannot be reasonably assessed without it.

<sup>25</sup>These include examining a rare events logit model, sensitivity to the choice of controls, sensitivity to weights, and sensitivity to the civilian subsample used. A memo providing these results is available on the web at [http://www.columbia.edu/~mh2245/papers1/HW\\_AJPS\\_07/](http://www.columbia.edu/~mh2245/papers1/HW_AJPS_07/).

<sup>26</sup>We note, however, that our results survive restricting our analysis only to those combatants who were approached by each group.

## APPENDIX Summary Statistics

Variable	Description	Source	Mean	SD	Min	Max
Mud Walls	Dummy = 1 if individual lived in house with mud walls before war	Authors	0.42	0.08	0	1
Education	0 = More than primary, 1 = Primary, 2 = None	Authors	0.31	0.11	0	2
Supports the SLPP	Dummy = 1 if individual supported the SLPP before the war	Authors	0.37	0.10	0	1
Mende	Dummy = 1 if Mende	Authors	0.32	0.13	0	1
Does Not Support Any Party	Dummy = 1 if individual supported no party before the war	Authors	0.28	0.07	0	1
Offered Money	Individual was offered money to join the group	Authors	0.14	0.07	1	3
Felt Safer in Group	Individual felt that it was safer inside than outside the group	Authors	1.39	0.06	0	1
Friends	Individual's first contact with group was through friends or relatives	Authors	0.17	0.03	0	1
Accessibility	Share of localities in chiefdom accessible only by foot or boat	FAO	28.47	2.10	4	100
Farmer	Farmer	Authors	0.07	0.03	0	1
Student	Student	Authors	0.37	0.07	0	1
Gender	Dummy = 1 if male	Authors	0.67	0.03	0	1
Age in 2003	Age in 2003 ( <i>in decades</i> )	Authors	3.3	0.11	1.5	7.9
Freetown	Dummy = 1 if individual lived in Freetown before war	Authors	0.23	0.08	0	1
Infant Mortality	Infant Mortality	1985 Census	0.18	0.004	0	1

Note: Means and standard deviations reported here are adjusted for differential weights between combatant and noncombatant respondents.

## References

- Abdullah, Ibrahim. 1998. "Bush Path to Destruction: The Origin and Character of the Revolutionary United Front/Sierra Leone." *Journal of Modern African Studies* 36(June): 203–35.
- Arjona, Ana, and Stathis Kalyvas. 2006. "Insurgent and Counterinsurgent Recruitment: An Analysis of Survey Data from Colombia." Presented at the annual meeting of the American Political Science Association.
- Azam, Jean-Paul. 2006. "On Thugs and Heroes: Why Warlords Victimize Their Own Civilians." *Economics and Governance* 7(January): 53–73.
- Beah, Ishmael. 2007. *A Long Way Gone*. New York: Farrar, Straus and Giroux.
- Berdal, Mats, and David Malone. 2000. *Greed and Grievance: Economic Agendas in Civil Wars*. Boulder, CO: Lynne Rienner.
- Davies, James. 1962. "Toward a Theory of Revolution." *American Sociological Review* 6(February): 5–19.
- Fearon, James. 2004. "Why Do Some Civil Wars Last So Much Longer than Others?" *Journal of Peace Research* 41(May): 275–302.
- Fearon, James, and David Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(February): 75–90.
- Gates, Scott. 2002. "Recruitment and Allegiance: The Microfoundations of Rebellion." *Journal of Conflict Resolution* 26(February): 111–30.
- Gberie, Lansana. 2005. *A Dirty War in West Africa: The RUF and the Destruction of Sierra Leone*. Bloomington: Indiana University Press.
- Goodwin, Jeffrey. 2001. *No Other Way Out: States and Revolutionary Movements, 1945–1991*. New York: Cambridge University Press.
- Goodwin, Jeffrey, and Theda Skocpol. 1989. "Explaining Revolutions in the Contemporary Third World." *Politics and Society* 17(December): 489–509.
- Gurr, Ted. 1970. *Why Men Rebel*. Princeton, NJ: Princeton University Press.
- Horowitz, Donald. 1985. *Ethnic Groups in Conflict*. Berkeley: University of California Press.
- Human Rights Watch. 1998. *Sowing Terror: Atrocities against Civilians in Sierra Leone*. New York: Human Rights Watch.
- Human Rights Watch. 2003. *We'll Kill You If You Cry: Sexual Violence in the Sierra Leone Conflict*. New York: Human Rights Watch.
- Kaldor, M. 1999. *New and Old Wars: Organized Violence in a Global Era*. Stanford, CA: Stanford University Press.
- Kalyvas, Stathis. 2001. "New and Old Civil Wars: A Valid Distinction?" *World Politics* 54(October): 99–118.
- Kalyvas, Stathis, and Matthew Kocher. 2007. "How 'Free' Is Free Riding in Civil Wars? Violence, Insurgency and the Collective Action Problem." *World Politics* 59(January): 177–216.
- Kandeh, Jimmy D. 1992. "Politicization of Ethnic Identities in Sierra Leone." *African Studies Review* 35(April): 81–99.

- Kaplan, Robert. 1994. "The Coming Anarchy: How Scarcity, Crime, Overpopulation, and Disease Are Rapidly Destroying the Social Fabric of Our Planet." *Atlantic Monthly* 44(February): 11–24.
- Keen, David. 2005. *Conflict and Collusion in Sierra Leone*. Oxford: James Currey.
- Kuran, Timur. 1989. "Sparks and Prairie Fires: A Theory of Unanticipated Political Revolution." *Public Choice* 61(April): 41–74.
- Lacina, Bethany. 2006. "Explaining the Severity of Civil Wars." *Journal of Conflict Resolution* 50(April): 276–89.
- Lichbach, Mark. 1995. *The Rebel's Dilemma*. Ann Arbor: University of Michigan Press.
- Lichbach, Mark. 1998. "Contending Theories of Contentious Politics and the Structure-Action Problem of Social Order." *Annual Review of Political Science* 1: 401–24.
- Lohmann, Susanne. 1993. "Dynamics of Informational Cascades: The Monday Demonstrations in Leipzig, East Germany, 1989–1991." *World Politics* 47(October): 42–101.
- Long, J. S., and J. Freese. 2006. *Regression Models for Categorical Dependent Variables Using STATA*. 2nd ed. College Station, TX: STATA Press.
- Maclure, Richard, and Myriam Denov. 2006. "'I Didn't Want to Die So I Joined Them': Structuration and the Process of Becoming Boy Soldiers in Sierra Leone." *Terrorism and Political Violence* 18(March): 119–35.
- Marx, Karl, and Friedrich Engels. 1968 [1848]. *The Communist Manifesto*. Middlesex: Penguin.
- Mason, T. David, and Dale Krane. 1989. "The Political Economy of Death Squads: Toward a Theory of the Impact of State-Sanctioned Terror." *International Studies Quarterly* 33(June): 175–98.
- McKay, S., and D. Mazurana. 2002. *Girls in Militaries, Paramilitaries, and Armed Opposition Groups: A Preliminary Review for 1990–2000*. <http://www.ddr-humansecurity.org.uk/images/Girls%20in%20Militaries%5B1%5D.pdf>.
- Melson, Robert, and Howard Wolpe. 1970. "Modernization and the Politics of Communalism." *American Political Science Review* 64(December): 1112–30.
- Merton, Robert. 1949. *Social Theory and Social Structure*. New York: Free Press.
- Moore, Barrington, Jr. 1966. *Social Origins of Democracy and Dictatorship*. Boston: Beacon Press.
- Muana, Patrick. 1997. "The Kamajoi Militia: Civil War, Internal Displacement and the Politics of Counter-Insurgency." *African Development* 22 (3/4): 77–100.
- Muller, Edward, and Mitchell Seligson. 1987. "Inequality and Insurgency." *American Political Science Review* 81(June): 425–52.
- Olson, Mancur. 1965. *The Logic of Collective Action: Public Goods and the Theory of Groups*. Cambridge, MA: Harvard University Press.
- Paige, Jeffrey. 1975. *Agrarian Revolutions*. New York: Free Press.
- Petersen, Roger. 2001. *Resistance and Rebellion: Lessons from Eastern Europe*. New York: Cambridge University Press.
- Popkin, Samuel. 1979. *The Rational Peasant: The Political Economy of Rural Society in Vietnam*. Berkeley: University of California Press.
- Richards, Paul. 1996. *Fighting for the Rainforest: War, Youth, and Resources in Sierra Leone*. Oxford: Heineman.
- Scott, James. 1976. *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven, CT: Yale University Press.
- Skocpol, Theda. 1979. *States and Social Revolutions*. Cambridge: Cambridge University Press.
- Taylor, Michael. 1988. "Rationality and Revolutionary Collective Action." In *Rationality and Revolution*, ed. Michael Taylor. New York: Cambridge University Press, 63–91.
- Truth and Reconciliation Commission. 2004. *Witness to Truth*. Accra, Ghana: Graphic Packaging.
- Van Belle, Douglas. 1996. "Leadership and Collective Action: The Case of Revolution." *International Studies Quarterly* 40(March): 107–32.
- Verwimp, Philip. 2005. "An Economic Profile of Peasant Perpetrators of Genocide: Micro-level Evidence from Rwanda." *Journal of Development Economics* 77(August): 297–323.
- Wickham-Crowley, Timothy. 1992. *Guerrillas and Revolution in Latin America: A Comparative Study of Insurgents and Regimes since 1956*. Princeton, NJ: Princeton University Press.
- Wille, Christina. 2005. "Children Associated with Fighting Forces (CAFF) and Small Arms in the Mano River Union (MRU)." In *Armed and Aimless: Armed Groups, Guns, and Human Security in the ECOWAS Region*, ed. Nicolas Florquin and Eric G. Berman. Geneva: Survey Arms Survey, 181–221.
- Wood, Elisabeth. 2003. *Insurgent Collective Action and Civil War in El Salvador*. Cambridge: Cambridge University Press.