Is There a Rebel Resource Curse? Reevaluating the Conventional Wisdom

Abstract:

How do recruitment tactics affect the success of rebel groups in civil wars? To what extent do material resources "curse" rebels? The conventional wisdom holds that recruitment strategies that rely more on ideological appeals, relative to material incentives, attract more committed recruits who are more invested in the success of their groups than their materially motivated counterparts. However, I argue that highly committed recruits provide rebel organizations with a double-edged sword. While ideological appeals help attract committed recruits, the most devoted militants also often introduce a variety of problems into the bargaining process, which undermine the ability of rebels to earn negotiated settlements. Furthermore, ideological-based recruitment strategies often fail to attract sufficiently powerful fighting forces, making it difficult for rebels to achieve outright victory. Thus, contrary to the conventional wisdom, I expect that ideologically based recruitment strategies do not help rebels achieve long-term success. To test this claim, I employ novel data on the recruitment practices of rebel organizations that were active across the world between 1989 and 2011. Departing from existing literature, I do not find evidence that greater reliance on ideological recruitment appeals, relative to material incentives, increases or decreases the probability that rebel organizations achieve favorable outcomes.

In his groundbreaking works, Weinstein (2005, 2007) posited that material wealth is actually a curse for rebel organizations. While such resources can help organizations fund their operations, Weinstein argues that when group mobilize around material incentives, they tend to attract opportunistic, uncommitted individuals who seek short-term material gain, but who are not invested in helping militant organizations achieve their long-term goals. In contrast, Weinstein asserts that in the absence of economic endowments, armed groups can instead mobilize recruits around social endowments, such as shared ideologies and identities. Weinstein expects that because groups that mobilize around ideological and identity-based ties have to make credible commitments about their ability to deliver benefits in the future, they tend to attract only highly committed individuals who are willing to forgo short-term gains in exchange for long-term benefits.

Based on this idea, Weinstein argues that rebel movements that mobilize around material incentives will struggle to succeed in the long-run. Weinstein refers to this as the "Rebels' Resource Curse." Indeed, Weinstein (2005, p. 600) writes that "while natural resources and other economic endowments initially appear as a blessing to would-be rebels, they attract recruits that are possibly ill suited to the long-term goal of capturing state power." Weinstein (2005, p. 603) further elaborates that "At the early stages of rebellion, the presence of uncommitted soldiers can irreparably harm a movement and lead to its quick defeat. Hence, rebel leaders wish to recruit high-commitment as opposed to low-commitment individuals."

Weinstein goes on to argue that the success of the National Resistance Army in Uganda and the Eritrean People's Liberation Front can be attributed to the fact that they primarily mobilized around social endowments, while the struggles of Renamo in Mozambique and the

Revolutionary United Front in Sierra Leone can be attributed to their heavy reliance on material resources to recruit members.

Thus, this extensively cited wisdom maintains that rebel groups have a greater chance of success if they rely more on ideological appeals, relative to material incentives, to mobilize recruits. However, there is a dearth of quantitative research examining how rebel recruitment strategies affect their long-term success. I posit that previous work has overlooked some of the distinct drawbacks of ideological based recruitment strategies, and that on the whole, such tactics do not provide rebels with a distinct advantage, relative to those that rely more heavily on material incentives for recruitment.

Importantly, I am *not* arguing that groups will be more successful if they employ material recruitment incentives. Indeed, these groups tend to be plagued by a lack of commitment, desertion, defection, and in-fighting among the ranks (e.g., Weinstein 2005, 2007). Instead, I argue that there is not clear evidence of a "rebel resource curse," as there are empirical and theoretical reasons to believe that ideological-based mobilization strategies, relative to materially centered ones, do not significantly improve rebels' chances of success.

I posit that heavy reliance on ideological recruitment appeals undermines the ability of rebels to both earn negotiated settlements and achieve outright victory over the governments they are fighting. In terms of winning negotiated settlements, ideological-based mobilization strategies introduce a variety of problems to the bargaining process between rebel groups and governments, making it difficult to reach settlements. Specifically, I expect that ideological-based recruitment strategies, and they ideologically driven recruits they tend to attract, exacerbate information asymmetries about the resolve and capabilities of rebels, credible commitment problems, and issue indivisibilities, all of which make it difficult for actors to resolve conflicts with each other

(Fearon 1995). Furthermore, ideological-based recruitment strategies sometimes fail to mobilize sufficiently strong fighting forces, erecting a major obstacle to total victory for rebels.

Using data from the Rebel Appeals and Incentives Dataset (RAID) (Soules 2023) and the Uppsala Conflict Data Program's (UCDP) Conflict Termination Dataset (Kreutz 2010), I quantitatively test the conventional wisdom that rebel groups will be more successful when they rely more heavily on ideological appeals, relative to material incentives, for recruitment. I fail to find support for this conventional wisdom, as I do not find a statistically significant association between the degree to which groups rely on ideological appeals, and the probability that they achieve favorable outcomes, such as negotiated settlements or total victory. Additionally, across a variety of alternative tests, I do not find support for the idea that there is a "rebel resource curse."

This paper makes at least two significant contributions. First, it challenges the notion that material-based recruitment strategies are a "curse" for rebel organizations. Instead, I posit that there are also many disadvantages to relying on ideological appeals for recruitment, and that these recruitment strategies ultimately do not make groups more successful. Again, I am not arguing that it is more beneficial for groups to recruit with material incentives, as there are many disadvantages associated with these appeals as well (e.g., Weinstein 2005, 2007). However, the benefits of non-material recruitment strategies have been overstated in some prior work.

Existing work has examined how variation in rebel ideology, as well as ideological incompatibilities between rebels and governments, helps explain the long-term success of militant movements (e.g., Basedau et al. 2022; Keels and Wiegand 2020; Nilsson and Svensson 2020, 2021; Svensson 2007). While valuable, this work does not evaluate the claim that material-based recruitment strategies are more detrimental to rebels' long-term success than ideological-based mobilization strategies. Relatedly, I am *not* arguing that there is not important variation in

how different ideologies affect the success of armed organizations. Instead, I am challenging the notion that ideological-based recruitment strategies are more beneficial for rebels' efforts to achieve their goals than material recruitment incentives.

Second, this paper provides, to the best of my knowledge, the first cross-rebel group quantitative analysis of how the material and ideological recruitment appeals rebels employ affect the outcomes they experience. While valuable data exist on the ideologies of rebel organizations (e.g., Basedau et al. 2022; Polo and Gleditsch 2016; Wood and Thomas 2017), and their material resources (e.g., Sawyer et al. 2017; Walsh et al. 2018), these datasets do not capture the actual mobilization strategies of rebel organizations. This is significant because the material and ideological resources of militant organizations do not always translate into their recruitment strategies (e.g., Herbst 2000; Soules 2023).

Thus, this study provides more direct evidence of the consequences of recruitment strategies than do other cross-group quantitative analyses on how ideological and material resources affect rebel groups' longevity and success (Basedau et al. 2022; Conrad et al. 2018; Keels and Wiegand 2020; Nilsson and Svensson 2020, 2021; Sawyer et al. 2017; Svensson 2007).

In the next section, I will discuss what "success" is in the context of this paper. Following this, I review the literature on the consequences rebel group recruitment strategies in order to introduce the central hypothesis—which is based on the conventional wisdom—that I am evaluating in this paper. Next, I layout a variety of drawbacks of ideological-based recruitment strategies that challenge the conventional wisdom. I then present the research design and results and conclude by discussing the implications of the findings.

Defining Success

In analyzing how recruitment strategies affect rebel success, it is important that we first define success. In the context of civil war, success could mean a variety of achievements, including the retention of troops or the successful execution of military operations, among other outcomes. However, to analyze the full extent to which recruitment tactics "curse" (or benefit) rebel organizations, I argue that we must understand how they affect the ability of groups to achieve their goals, as military success is the central goal of all rebel organizations (Gates 2002, p. 112). Indeed, as noted above, Weinstein (2005) also predicts that groups that mobilize predominately around material incentives will struggle to achieve their long-term goals and face a significant risk of defeat.

Building off prior work on rebel success, I examine how recruitment tactics affect the probability that rebels experience favorable outcomes, such as entering peace agreements or achieving total victory over government forces, or unfavorable outcomes, such as suffering total defeat by government forces or by ending through low levels of activity (e.g., Braithwaite and Ruiz 2018; Cunningham et al. 2009; Fortna 2015; Greig et al. 2018; Kreutz 2010; Silverman et al. 2023).

Benefits of Ideological Recruitment

Scholars have detailed multiple benefits associated with relying more on ideological appeals than material incentives for recruitment. First, as noted above, ideological-based recruitment strategies are expected to attract highly committed individuals who are willing to forgo shortterm benefits for long-term gains (Weinstein 2005, 2007). All recruits, regardless of motive, have the incentive to signal that they are committed to the long-term goals of their organizations, which can make it difficult for rebel leaders that recruit with material incentives to filter out uncommitted recruits (Weinstein 2005, 2007). However, rebel leaders can engage in a variety of strategies, including utilizing social ties to gain information on recruits, to help screen out uncommitted individuals (e.g., Johnston et al. 2016; Weinstein 2005, 2007).

Consequently, ideologically committed recruits are expected to be less likely to desert and defect (e.g., Altier al. 2017; Gutiérrez-Sanín 2008; Oppenheim et al. 2015; Riley and Schneider 2022). Ideologically driven recruits are expected to prioritize actions that benefit the group as a whole, while materially motivated recruits are predicted to pursue private rewards, even at the expense of their groups (Humphreys and Weinstein 2006).

Second, ideological-based recruitment strategies can help improve rebel organizations' popularity. Indeed, non-violent propaganda by militant movements that includes ideological and grievance-based messaging helps increase support for the group (Mitts et al. 2022). Third, Humphreys and Weinstein (2006) posit that materially driven recruits are more likely to pursue personal, material gain over actions that benefit their groups. As a result, they are more likely to engage in abusive behavior towards civilians, particularly when it facilitates the acquisition of material resources (i.e., looting). In contrast, they expect that ideologically motivated recruits will be more likely to engage in activities that benefit the group as a whole and are less interested in personal enrichment.

Thus, a prevailing expectation in the literature is that rebel groups that rely more on ideological appeals, relative to material incentives, for recruitment, will be more likely to attract highly committed recruits who are less likely to desert and defect, and who work for the good of the group. Furthermore, at least certain types of ideological appeals are expected to increase the popularity of rebel groups. This all suggests that groups should be more likely to achieve their

long-term goals if they have recruits and civilian supporters who are more committed to the cause and who engage in behavior to benefit their group as a whole. Specifically, a testable implication derived from this literature is that:

H1: Rebel groups that rely more heavily on ideological appeals for recruitment will be more likely to achieve favorable outcomes than groups that rely more on material incentives for recruitment.

However, there are several disadvantages to ideological-based recruitment strategies that have been overlooked in prior scholarship. I posit that such problems make it difficult for rebel groups to either earn negotiated settlements or achieve outright victory. I turn to these issues in the next section.

Bargaining Issues and Negotiated Settlements

Private information about the capabilities and resolve of actors, and incentives to misrepresent this information; credible commitment problems; and issue indivisibilities all undermine the ability of actors to reach peaceful negotiated settlements instead of fighting (Fearon 1995). Prior scholarship has examined how a variety of types of rebel ideologies heighten these bargaining issues (e.g., Basedau et al. 2022; Keels and Wiegand 2020; Nilsson and Svensson 2020, 2021; Svensson 2007). However, again, such work has not compared the effects of ideological and material-based recruitment strategies on the ability of rebel organizations to earn negotiated settlements.

Information Asymmetries and Incentives to Misrepresent

Uncertainty about the military capacity of opponents, and their resolve to fight or continue fighting, creates issues for the bargaining process. This uncertainty means that actors could under or overestimate the strength and resolve of their opponents, leading them to inefficiently bargain. Due to this, actors have the incentive to misrepresent their capacity and resolve in order to improve their bargaining positions (Fearon 1995). Similarly, I expect that heavy reliance on ideological appeals for recruitment can generate significant uncertainty about the capabilities and resolve of rebel organizations.

Capacity

First, heavy reliance on ideological appeals can create uncertainty about the capabilities of rebel groups. Weinstein (2005, 2007) argues that one reason rebel groups with significant economic resources employ material recruitment incentives, despite the risks of doing so, is that material appeals can help rapidly mobilize a large number of recruits, protecting armed movements from being quickly overwhelmed by competitors. Thus, especially in early stages of conflicts, groups that rely more on ideological appeals may not mobilize forces that are nearly as large as organizations that extensively employ material incentives. Consequently, even if ideologically driven groups have highly committed soldiers, governments might observe the smaller size of these organizations, and come to believe that the rebels do not have sufficient military capacity to inflict significant costs.

Additionally, especially in earlier stages of conflicts, governments might have difficulty ascertaining whether groups' calls to mobilize around particular ideologies will inspire many to

take up arms for their causes, or if their ideologies will alienate significant portions of civilian populations. On one hand, rebels' ideological platforms might help mobilize civilians with significant grievances, particularly those who have not previously felt well-represented by other dissident movements (e.g., Mitts et al. 2022; Schwab 2023; Tokdemir et al. 2021). This could signal to governments that the ideological-driven rebel groups are popular and that they have recruits who are highly committed, making these groups forces to be reckoned with.

However, on the other hand, mobilizing around platforms that are perceived as being too ideological extreme can also lead to popular backlash against militant groups and repel external support (e.g., Jones and Libicki 2008; Schwab 2023). Indeed, militants that are believed to be pursuing the fundamental destruction or restructuring of society could alienate large portions of the public (Abrahms 2006). Even if a rebel organization's platform is not widely perceived to be ideologically extreme, it might still fail to resonate with many civilians, leading to such militant movements failing to be mobilize enough recruits to be successful.

While some rebel ideologies are more divergent from the median citizen's beliefs than others (e.g., Gabbay 2008), governments might still sometimes have difficulty determining whether a militant group's ideology will help it garner support or alienate large numbers of civilians. Said differently, governments might have a difficult time determining whether civilians will perceive a group's ideology as being persuasive and/or too extreme. This issue may even persist over time, as governments can be uncertain about how long civilians will be willing to support a rebel group's ideological goals.

As will be discussed later, this issue of ability to mobilize sufficient support also has implications for rebels' ability to achieve outright victory. To preempt what might seem like a contradictory argument, I am *not* arguing that ideological-based recruitment strategies uniformly

fail to mobilize sufficiently strong fighting forces (thus undermining rebels' ability to win outright). Instead, I am positing that prior literature suggests that sometimes material-based recruitment strategies mobilize larger fighting forces, but that other times, ideological appeals that are popular can attract large numbers of soldiers.

As a result, this means both that (1) there is can be significant uncertainty surrounding the capabilities of groups that primarily recruit with ideological appeals and (2) ideological-based recruitment strategies might not have a clear military advantage (or disadvantage) over material-based mobilization tactics.

Resolve

I also expect that ideological-based recruitment strategies can create uncertainty about the resolve of rebel groups to continue fighting. Again, as discussed throughout the paper, ideological recruitment appeals can attract highly committed recruits who are willing to remain loyal to their groups, even during periods of significant adversity for their organizations (Weinstein 2005, 2007). Governments might therefore come to expect that groups with ideologically-driven recruits have the will to continue fighting, even when faced with significant military pressures. This can make governments more willing to negotiate with rebels if the former expects that the latter is willing to endure significant costs (e.g., Fearon 1995).

However, governments also have reason to be unsure of rebels' level of ideological commitment. For instance, Walter (2017) posits that one advantage of ideologically extreme recruitment appeals is that they signal groups' sincerity and commitment to a cause and can be appealing to moderates who fear that the process of bargaining with government forces will

dilute rebel demands too much if the militants do not push for significant concessions from the outset. Thus, governments might have doubts about whether rebel groups (particularly their leaders) are ideologically committed and/or extreme, or whether they are using ideology more instrumentally.

Relatedly, Thaler (2022) explains the process by which materially motivated rebel leaders engage in pandering. Specifically, Thaler posits that it is relatively costless for insincere militant leaders to pander to political grievances to quickly mobilize a larger number of aggrieved civilians. However, Thaler notes that this is a risky strategy because if recruits detect the insincerity of these leaders, they will defect or shift towards other militant factions or the government if those actors come to better address their grievances. Thaler describes how these dynamics played out for Renamo, the FDN, and the NPFL. Thus, even if rank-and-file soldiers of a group are ideologically devoted, the leaders may not be.

Tying these arguments together, governments might be uncertain about whether rebels' use of ideological recruitment appeals is sincere, or whether they are using ideology to pander or for some other instrumental purpose. This could call into question how sincere rebel groups are about their publicly stated ideological goals, generating uncertainty about their resolve. If governments perceive rebels to be insincere about their ideologies, and thus less resolved to keep fighting, then governments might prefer continuing to fight (and improving their bargaining position) to negotiating.

Credible Commitments

Conflicts become difficult to resolve if all sides cannot credibly commit to abiding by the terms of a peace agreement (Fearon 1995; Walter 1997). Conflict actors have a difficult time credibly committing that they will uphold their end of a peace agreement if they have the incentive to renege (Fearon 1995). I expect that heavy reliance on ideological appeals likewise creates credible commitment problems.

In broad terms, rebel movements with a higher percentage of ideologically motivated recruits will have a difficult time credibly committing that they will be satisfied enough by a compromise to abide by the terms of a settlement. Ideologically committed recruits are particularly likely to defect in response to groups not maintaining their original ideological goals (Oppenheim et al. 2015). Keels and Wiegand (2020) argue that when ideological issues are particularly salient and polarizing in a conflict, rebel leaders have a difficult time credibly committing to peace. This is because leaders could alienate their cadres if the former perceives the latter to be selling out by accepting certain compromises.

Furthermore, even if rebels initially accept some concessions, governments might fear that the rebels will renege and pursue more concessions in the future. This is particularly salient for groups that rely heavily on ideological recruitment appeals, given evidence that the most ideologically committed recruits are the ones more likely to remobilize (Mironova et al. 2020). Thus, because they have difficulty credibly committing to peace, groups that mobilize extensively around ideological appeals will have difficulty achieving long-term success because governments will not want to compromise with them (undermining the opportunity to gain concessions).

Issue Indivisibilities

Another salient problem that ideological-based recruitment introduces to the bargaining process is the exacerbation of issue indivisibilities. Fearon (1995) explains that issue indivisibilities arise when (1) disputing parties view any compromise on an issue as too drastically diminishing its value to make compromise worth it and/or (2) there are no other concessions that can be made in other areas to substitute for proposed concessions on an issue that at least one side views as indivisible.

Indeed, Svensson (2007) argues that religious ideologies in civil wars exacerbate both core problems associated with issue indivisibilities. Recruits with religious (Hassner 2003; Svensson 2007; Toft and Zhukov 2015; Nilsson and Svensson 2020; Basedau, Deitch, and Zellman 2022) and/or (ethno)nationalist motives (Hasner 2003; Goddard 2006; Wucherpfennig et al. 2012) particularly view certain issues as indivisible. Relatedly, the opposition will often crackdown hard on rebels that are able to effectively use ideology to mobilize recruits out of the fear that such rebels are unwilling to compromise but are effective and devoted (Balcells and Kalyvas 2015; Hafez 2018). This poses further obstacles to groups achieving their goals.

We see similar evidence at the level of individual recruits. In the Syrian Civil War, exfighters that were ideologically committed to fighting the Assad regime or establishing an Islamic state were more likely to remobilize (Mironova et al. 2020). These recruits are also more likely to remobilize when they believe the group will pursue total victory over negotiated settlements (Mironova et al. 2020). Other studies also present individual-level evidence that ideologically motivated recruits are less likely to desert or defect (Altier al. 2017; Gutiérrez-Sanín 2008; Oppenheim et al. 2015). While this unwillingness to surrender might seem like a benefit for rebel groups on the surface, it can also mean that ideologically driven recruits are less

likely to support compromise and/or accept offers of amnesty, making it difficult for their organizations to eventually be granted concessions as part of the negotiating process.

Mobilizing Sufficient Support

Many of the aforementioned issues associated with ideological recruitment undermine rebels' ability to bargain, and thus, their subsequent ability to achieve negotiated settlements. It is possible, however, that while ideologically driven groups might be less likely to negotiate (and thus win at least some concessions), that they will fight hard enough to achieve outright victory.

However, I also expect that groups will struggle to achieve total victory when they mobilize heavily around ideological appeals. While ideological appeals might attract highly committed recruits, they do not necessarily sufficiently strengthen the group enough to produce total victory, as ideological appeals do not necessarily have a distinct advantage over material incentives in their ability to mobilize sufficiently powerful fighting forces. Indeed, as discussed earlier, sometimes ideological-based mobilization strategies mobilize large numbers of devoted troops, while other times they fail to gain significant traction. I detail these issues below.

To start, as discussed earlier, Weinstein (2005, 2007) expects that, relative to material incentives, ideological appeals tend to attract significantly fewer recruits. Thus, even if they attract recruits who are more committed, ideological appeals are not always effective at mobilizing a large number of combatants. Given the importance of overall strength and troop size in achieving favorable outcomes (e.g., Gates 2002 Cunningham et al. 2009), having a small number of recruits, even if they are devoted, might be detrimental to militant organizations.

Furthermore, not only might material incentives attract a large number of recruits, but some types of ideological appeals might be particularly ineffective at mobilizing sufficient support. In particular, the general public might view some ideological recruitment appeals as too weak or too moderate, while perceiving others to be too ideologically extreme. Said differently, rebel groups are at risk of making ideological recruitment appeals that are perceived as too moderate or too extreme to attract a large number of people. Instead, their ideological appeals must be "just right." Both problems can deter potential joiners. Again, this makes it difficult for rebels to recruit adequate fighting forces.

Indeed, if rebels make ideological appeals that are perceived as too moderate, then they risk civilians believing that they will be more inclined to "sellout" the cause or to not push hard enough for substantial concessions. Furthermore, civilians might fear that if groups have moderate ideological platforms, that the bargaining process will dilute the rebels' demands so much that they will not achieve sufficiently significant concessions (Walter 2017).

Mobilizing around platforms that are perceived as being ideological extreme can also lead to popular backlash against militant groups and repel external support (Schwab 2023). Indeed, militants that are perceived to be attempting to fundamentally alter or destroy existing societal structures risk alienating civilians (Abrahms 2006). Thus, while rebels' demands might get diluted in the bargaining process, civilians might fear that groups that make extremist ideological appeals will only try to make ideologically extreme demands.

Thus, rebel organizations that rely primarily on ideological appeals to mobilize recruits must strike a balance between not appearing too moderate and non-committal, while also not appearing too extreme and overly committed. This balance can be difficult to achieve, as what constitutes "too moderate" and "too extreme" likely varies significantly within populations.

However, as noted earlier, ideological recruitment strategies sometimes resonate with significant portions of the population, helping groups garner high levels of popular support and recruits (e.g., Mitts et al. 2022; Schwab 2023; Tokdemir et al. 2021). Ideologically motivated recruits might also be less likely to desert or defect (Weinstein 2005, 2007). Thus, in some contexts, ideological-based strategies might have the advantage in mobilizing sufficiently strong fighting forces.

In sum, ideological-based recruitment strategies do not have a clear advantage (or disadvantage) over material-based mobilization tactics in terms of their ability to mobilize a force that is sufficiently strong to achieve outright victory over a government. Ideological recruitment appeals might sometimes resonate with a large number of potential recruits, but other times alienate significant segments of the population by seeming too moderate or too extreme. Additionally, while ideological appeals might attract more committed recruits who are less likely to defect or desert, material incentives might be better for rapidly mobilizing troops (Weinstein 2005, 2007). Thus, both types of recruitment appeals have tactical advantages and disadvantages, and as a result, neither type of group has a clear military advantage.

Ideological Recruitment and Rebel Success

Again, the conventional wisdom is that rebel groups, on average, will be more successful when they recruit more heavily with ideological appeals than material incentives. However, as detailed above, I do not expect to find support for the conventional wisdom, as I posit that ideological-based recruitment strategies, and the ideologically motivated recruits they tend to attract, will introduce a variety of problems to the bargaining process that undermine the ability of rebel groups to garner negotiated settlements. Furthermore, I expect that ideological-based

recruitment strategies often do not result in the formation of groups that are sufficiently powerful to totally defeat the governments they are fighting.

As an important caveat, I do not expect that groups will be more successful if they rely heavily on material incentives for recruitment. Indeed, these groups tend to be plagued by high levels of ill-discipline, desertion, and defection, as members will be more likely to pursue personal enrichment over the good of their groups (Humphreys and Weinstein 2006; Weinstein 2005, 2007). These issues will also make it difficult for materially driven groups to garner negotiated settlements or to achieve total victory over government forces. However, I do expect that the benefits of ideological recruitment appeals, relative to material incentives, have been overestimated in existing scholarship, as the former type of recruitment tactic also carries significant problems with it. I now turn to empirically evaluating the conventional wisdom.

Research Design

Sample

To test the conventional wisdom, I rely on data from the Rebel Appeals and Incentives Dataset (RAID), which provides information about the recruitment strategies of rebel organizations (Soules 2023). RAID covers a global 232 rebel movements that were active at some point between 1989 and 2011. Organizations can enter the dataset before 1989 and/or leave after 2011, they just had to have been active at some point during this period to enter RAID. The sample of actors in RAID is taken from the Non-State Actor (NSA) dataset (Cunningham et al. 2013). While other valuable datasets exist that cover the ideological and/or material resources of rebel organizations (e.g., Basedau et al. 2022; Braithwaite and Cunningham 2020; Polo and Gleditsch 2016; Walsh et al. 2018; Wood and Thomas 2017), RAID is the only dataset, to the best of my knowledge, that contains measures which directly capture the recruitment practices of militant groups.

Independent Variable

The main explanatory variable of this study is taken from RAID and is a five-point ordinal measure of the extent to which groups rely on ideological appeals, relative to material incentives, for recruitment. Specifically, this scale captures groups that rely entirely on material incentives (0), mostly on material incentives and very little on ideological appeals (1); a relatively even combination of ideological and material appeals (2); mostly on ideological appeals and very little on material incentives (3); or entirely on ideological appeals (4).

Thus, higher values of the variable indicate greater reliance on ideological appeals, while lower values translate to greater reliance on material incentives. Greater values of this variable should translate to a higher percentage of members being ideologically committed, which the conventional wisdom maintains should be associated with an increased probability of success for such groups.

To construct RAID, detailed qualitative narratives were written about the recruitment practices of all groups in the sample. These narratives included not only provide details on the specific types of recruitment appeals employed by groups, but the relative frequency at which they used them. Based on this information, it was first determined whether the group used only ideological appeals or only material incentives for recruitment, or if they employed both. If only one broad type of appeal was used, the group was coded as being on one of the respective far ends of the spectrum. If the group made some combination of material and ideological appeals, it was then determined whether the group employed both at the same relative frequency (2 on the

ordinal scale), or if one type of appeal was used more frequently or systematically than the other (1 or 3 on the ordinal scale) (Soules 2023). As will be discussed below, this variable is time invariant due to difficulties in gathering detailed information on the recruitment practices of rebels. Thus, RAID is a cross-sectional dataset (Soules 2023).

Dependent Variable and Estimation Strategy

To test the central hypothesis, I employ data on the ways in which rebel groups end. Following the precedent of several studies on civil war termination (e.g., Fortna 2015; Gurses 2015; Greig et al. 2018; Phayal et al. 2019), I use data from the UCDP Conflict Termination Dataset (version 3-2021), updated from the original version developed by Kreutz (2010). This dataset contains information on multiple types of outcomes, including whether (1) a rebel group ends because of a peace agreement or ceasefire; (2) a rebel group achieves total victory; (3) a rebel is defeated by government forces; or (4) the group ends through low levels of activity (i.e., "fizzling out"). The former two outcomes are considered favorable outcomes, while the latter two are viewed as unfavorable (Fortna 2015).

I employ competing-risk duration models because they allow for the analysis of the probability that conflicts end in specific ways, *relative* to other potential types of outcomes (e.g., Fortna 2015; Phayal et al. 2019, p. 490). These models are also helpful because the data are right-censored, as not all groups have terminated by the end of the analysis period and because the models help address issues related to temporal dependence. Similar to Wood and Allemang (2022), I use a dyad-episode unit of analysis because the main explanatory variable is time invariant. The models capture the time, in years, between the beginning of the episode and its specific form of termination experienced by a rebel group.

Control Variables

I hold a variety of potentially confounding factors constant. First, using data from RAID, I include a binary indicator of whether a rebel group has a multi-ethnic membership. This variable does not specifically measure a deliberate recruitment strategy, but rather, simply captures whether there is evidence that members of the rebel organization come from two or more ethnic groups. Ethnic ties within rebel movements can both affect their recruitment strategies as well as their longevity and success (Weinstein 2005, 2007).

Next, the ideological foundations of rebel groups help shape their recruitment strategies (Weinstein 2005, 2007). Rebels with certain ideologies, particularly illiberal ones, are more likely to wage intractable conflicts and experience unfavorable outcomes (e.g., Basedau et al. 2022; Keels and Wiegand 2020; Nilsson and Svensson 2020, 2021; Svensson 2007). Thus, using data from both the Foundations of Rebel Group Emergence (FORGE) dataset (Braithwaite and Cunningham 2020), and the Women in Armed Rebellion Dataset (Wood and Thomas 2017), I include two separate binary indicators: one measuring whether the group has a radical Islamist ideology, and the other if it has any kind of left-wing ideology. Given that including these measures along with the main explanatory variable could lead to issues associated with multicollinearity, I conduct robustness checks in which I exclude these two control variables. The core findings do not change. Relatedly, secessionist conflicts tend to be difficult to resolve (e.g., Fearon 2004) and rebels' goals might also shape their recruitment strategies. Thus, I include a dichotomous indicator of whether a group has secessionist aims.

Rebels' capacity, including their natural resource wealth, external patronage, and level of territorial control, also affects their recruitment strategies (e.g., de la Calle and Sánchez-Cuenca 2012; Weinstein 2005, 2007), as well as their level of success (e.g., Cunningham et al. 2009). I

control for several variables to account for these dynamics. Using data from the NSA dataset, I include a five-point ordinal measure that captures rebel groups' strength, relative to the governments they are fighting. Additionally, using the NSA dataset, I include binary indicators of whether the group receives any sort of support from external actors and whether they control territory. Furthermore, using data from the Rebel Contraband Dataset (Walsh et al. 2018), I include a dichotomous measure of whether a group exploited natural resources for profit.

Finally, state capacity and regime type also affect the operations of rebel groups and the outcomes they experience (Cunningham et al. 2009). Thus, I control for the Polity V Project's 21-point ordinal measure of how democratic a country is (Marshall and Gurr 2020), as well as the logged per capita GDP of the country, with data from the World Bank (2021). Both measures are taken for the first year of a group's operations.

Results

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	. ,	Agreement	. ,	l Victory	Gov. V	. ,	Fizzle	()
		0		2		2		
Ideological Recruitment	1.055	1.147	1.305	1.060	0.831	0.728	1.013	1.000
	(0.0901)	(0.107)	(0.359)	(0.207)	(0.144)	(0.149)	(0.0646)	(0.0704)
Multi-Ethnic Rebels	0.957	1.025	0.826	0.419	0.377*	0.517	1.235	1.192
	(0.212)	(0.255)	(0.501)	(0.332)	(0.189)	(0.280)	(0.172)	(0.181)
Radical Islamist	0.538*	0.364***	0.361	1.25e-07***	1.973	4.785**	1.051	1.155
	(0.173)	(0.136)	(0.363)	(1.03e-07)	(1.086)	(3.297)	(0.180)	(0.235)
Left-Wing	0.741	0.553**	1.987	3.350*	0.850	0.796	1.023	1.107
	(0.179)	(0.163)	(1.359)	(2.182)	(0.434)	(0.560)	(0.164)	(0.195)
Secessionist Aims	1.012	0.700	0.127*	0.158*	0.487	0.631	1.152	1.307
	(0.238)	(0.185)	(0.140)	(0.170)	(0.238)	(0.356)	(0.197)	(0.286)
Relative Rebel Strength	1.490***	1.578***	2.894***	6.520***	0.935	1.075	0.511***	0.433***
	(0.180)	(0.245)	(1.167)	(4.082)	(0.234)	(0.307)	(0.0857)	(0.0970)
Natural Resource				/ -				
Exploitation	1.300	1.267	1.524	2.247	0.802	0.583	0.689**	0.755*
	(0.287)	(0.327)	(0.826)	(1.327)	(0.377)	(0.310)	(0.102)	(0.117)
Territorial Control	1.053	1.126	1.203	1.345	2.554**	4.123***	0.851	0.811
	(0.233)	(0.281)	(0.697)	(0.795)	(1.088)	(2.205)	(0.151)	(0.172)
Externally Supported Rebels	1.628**	1.517*	1.508	1.199	0.222***	0.171***	0.918	0.891
Rebeis	(0.359)	(0.367)	(0.926)	(0.726)	(0.104)	(0.0872)	(0.141)	(0.143)
Polity2	(0.339)	1.049**	(0.920)	0.946	(0.104)	1.013	(0.141)	0.973*
Tonty2		(0.0235)		(0.0501)		(0.0489)		(0.0151)
per capita GDP		1.121		0.898		0.778		1.004
per capita ODI		(0.101)		(0.327)		(0.124)		(0.0634)
		(0.101)		(0.327)		(0.127)		(0.0057)
Observations Hazard ratios reported	382	314	382	314	382	314	382	314

Table 1: Reliance on Ideological Recruitment Appeals, Relative to Material Incentives, and Rebel Outcomes

Hazard ratios reported

Robust standard errors in parentheses

The results are displayed in **Table 1**. The standard errors are clustered on the rebel group in every model and the hazard ratios are reported. As the results show, I do *not* find support for the conventional wisdom that rebel groups will be more likely to achieve favorable outcomes, such as negotiated settlements and total victory, when they rely more on ideological appeals than material incentives for recruitment.

In the models for the favorable outcomes (negotiated settlements and rebel victory), the measure of reliance on ideological appeals has hazard ratios above one, indicating that these groups are more likely to achieve these outcomes. However, this association never reaches statistical significance. There is also *not* a statistically significant association between reliance on ideological appeals and the probability of experiencing unfavorable outcomes. Thus, I did not find evidence that groups are more or less likely to be successful when they rely more on ideological appeals than material incentives for recruitment.

Consistent with prior literature, there is more evidence that radical Islamist groups are less likely to experience favorable outcomes (e.g., Svensson 2007), while left-wing ideologies do not have as consistent effects. In line with existing scholarship, I also find that higher relative rebel strength and external support are both associated with an increased probably of receiving a negotiated settlement, while higher relative strength is also associated with an increased probability of outright victory for rebels (Cunningham et al. 2009).

Robustness Checks

I conduct a variety of robustness checks to assess whether there is any other evidence of the conventional wisdom analyzed in this paper. The results are available in the online appendix.

Alternative Outcome Variables

First, I consider other ways to measure rebel group success. One potential issue is that the conflict termination data used in the main analysis does not capture rebels' efforts to enter negotiations nor the breadth of concessions that they receive (Thomas 2014). In response to this, I replicate two studies that measure rebel negotiations and concessions, adding in the measure of relative reliance on ideological recruitment appeals.

I begin by replicating Thomas (2014), who examines how terrorism affects both the probability that rebel groups enter negotiations with governments and the number of concessions rebels receive from governments. Her sample covers 106 African rebel organizations between 1989 and 2010. If the conventional wisdom is correct, we should see evidence that groups are more likely to enter negotiations, and earn concessions, when they mobilize predominately around ideological appeals.

Using replication data and code from Thomas, I rerun the main analysis, adding in the fivepoint ordinal measure of reliance on ideological appeals. I do not find evidence of a statistically significant relationship between reliance on ideological appeals and the probability rebels enter negotiations, nor do I find a statistically significant association between this explanatory variable and any of the counts of concessions built by Thomas. Thus, even using more fine-grained data, I do not find support for the idea that material-based recruitment strategies uniquely "curse" rebel organizations.

There is a possibility that I find only null results because the sample discussed above is restricted to only African rebel groups. In response, I replicate research by Cunningham and Sawyer (2019), which uses a global sample of rebel groups to examine how the means by which rebel leaders rise to power within their organizations influences the probability that they enter

negotiations. I also use replication data and code from this study to rerun analyses that include the ordinal measure of reliance on ideological appeals. I do not find evidence that reliance on ideological appeals affects the probability that rebels enter negotiations, which is often an important step towards garnering concessions (Thomas 2014).

Alternative Explanatory Variables

Another issue that could be driving the results is how the central explanatory variable is measured. Indeed, there was a subjective element of determining what position on the ordinal scale that any one rebel group fell (Soules 2023). I take a couple different measures in response. First, I employ a simplified three-point version of the original five-point ordinal measure of reliance on ideological appeals. Specifically, this variable collapses the original measure into three categories: exclusive reliance on material incentives (0), any combination of material and ideological appeals (1), and total reliance on ideological appeals (2). I rerun the main analysis using this measure and still do not find a statistically significant association between reliance on ideological appeals and the probability of experiencing any of the outcomes.

Next, RAID contains a measure of the degree of confidence associated with coding the fivepoint ordinal indicator of reliance on ideological appeals for each group. This variable captures whether there was low (1), moderate (2), or high (3) confidence in the coding. I reconduct the main analysis, excluding all observations that received the lowest level of certainty for the coding of the main independent variable. I once again do not find evidence of a statistically significant association between reliance on ideological recruitment appeals and any of the outcomes of interest.

Accounting for Variation in Ideology

Yet another potential issue is that, among groups that recruit heavily with ideological appeals, there is significant variation in the types of ideologies that they organize around. Before empirically delving into this issue further, it is important to reemphasize why I do not examine variation in types of ideology in the main analysis. While this variation in ideology helps explain the outcomes rebels experience (e.g., Keels and Wiegand 2020), the conventional wisdom that ideological-based recruitment strategies produce more favorable outcomes than material-based mobilization tactics has largely been untested. This school of thought focuses on variation in reliance on material and ideological appeals, not variation within ideological-based recruitment strategies are generally preferable, as certain ideologies lead rebels to wage more intractable and less successful fights (e.g., Basedau et al. 2022; Keels and Wiegand 2020; Nilsson and Svensson 2020, 2021; Svensson 2007).

It is still important, however, to account for the possibility that some dimension of ideological variation is driving the core findings. To start, in the main models, I control for whether rebel groups have a radical Islamist or left-wing ideology. However, these variables might be highly correlated with the main explanatory variable, introducing issues related to multicollinearity. To account for this, I rerun the main analysis, removing these two control variables. I still do not find any evidence that greater reliance on ideological appeals is associated with an increased or decreased probability of experiencing any of the outcomes of interest.

Next, I reconduct the main analysis twice, once excluding all groups with a radical Islamist ideology and once excluding all groups with a left-wing ideology. I do this because such ideologies can make conflicts more intractable, even relative to some other types of ideology

(Basedau et al. 2022). When I do this, reliance on ideological appeals never has a statistically significant association with the probability that groups earn negotiated settlements, achieve total victory, or fizzle out through low levels of activity. However, in both models in which left-wing groups are excluded, and one in which radical Islamist groups are left out, reliance on ideological appeals is associated with a decreased probability of experiencing defeat by government forces. This association is statistically significant in these three models.

Thus, there is some evidence that, among a subset of rebel groups (perhaps less radical ones), reliance on ideological appeals helps stave off total defeat by government forces. However, I still do not find evidence that such recruitment strategies help groups achieve their long-term goals, either through negotiated settlement or total victory.

Overall, even when I subject the central hypothesis to a battery of alternative tests, I do not find consistent evidence supporting it. Thus, I do not find substantial evidence in support of the conventional wisdom that rebel organizations are more likely to be successful if they rely more heavily on ideological appeals than material incentives for recruitment.

Conclusion

A commonly held wisdom is that rebel organizations that mobilize recruits with material incentives are cursed, as they tend to attract uncommitted, opportunistic individuals who undermine the long-term goals of their groups. However, there is a dearth of quantitative literature investigating how recruitment practices affect the success of rebel movements.

In this paper, I posit that there are several significant, but often overlooked, drawbacks of ideological-based recruitment strategies, and the ideologically committed recruits they draw in. These issues challenge the idea that ideological appeals are the superior recruitment tool. Specifically, ideological appeals and recruits can introduce a variety of problems into the bargaining process with governments, all of which undermine rebels' chances of earning negotiated settlements. Furthermore, ideological-based recruitment strategies do not provide a clear advantage, relative to material incentives, in building powerful fighting forces, and thus, ideologically driven groups will not be more likely to achieve total victory over government forces.

Using novel data on rebel recruitment practices, I examine how armed groups' reliance on ideological recruitment appeals, relative to material incentives, affects their fate. Contrary to the conventional wisdom, I do not find evidence that ideological based recruitment strategies increase or decrease the probability of success for militant movements. Again, I do not expect that rebels will be more successful if they employ material incentives to mobilize recruits, nor do the results show this. Instead, there is no clear evidence of material incentives or ideological appeals having greater long-term benefits for rebels' efforts to achieve their goals.

Of course, null results mean that I did not find evidence for the conventional wisdom, *not* that I found evidence against it. However, the ideas underpinning the "rebel resource curse" have largely been unchallenged both theoretically and empirically. Thus, it is worth evaluating this conventional wisdom. Future work should continue to interrogate the idea that rebels with an abundance of wealth face a resource curse. Indeed, while material wealth might sometimes curse rebel groups, ideology can too.

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Online Appendix – Is There a Rebel Resource Curse?

This document contains the online appendix for the paper "Is There a Rebel Resource Curse? Revaluating the Conventional Wisdom." The tests are described in the "Robustness Checks" section of the main paper. To start, I replicate studies by both Thomas (2014) and Cunningham and Sawyer (2019), adding in the five-point ordinal measure of reliance on ideological recruitment appeals used in the main analysis of my article.

Both the former and latter studies contain outcome variables measuring whether rebels entered into negotiations, while the former also provides dependent variables capturing the number of concessions rebel groups earned from governments. Replicating and extending these studies allows me to examine how reliance on ideological recruitment appeals, relative to material incentives, affects other metrics of rebel success beyond those used in the main analysis.

Thomas (2014) employs monthly data on the terrorist attacks, negotiations, and concessions for 106 African rebel groups during the period of 1989 to 2010. I begin by replicating her analysis of Hypothesis 1, which examines the effects of terrorism on the probability that governments offer negotiations to rebel groups. Thomas conducts logistic regression analysis in which the dependent variable is a binary indicator of whether governments engaged rebels in negotiations in a given month. I include all the original covariates *and* add in the five-point ordinal measure of reliance on ideological appeals, relative to material incentives. While the relationship is positive, I do not find a statistically significant association between the probability that governments negotiate with rebels and the rebels' reliance on ideological appeals for mobilization (**Table A1**).

Next, I replicate Thomas's analysis of how terrorism affects the concessions that rebels receive from governments. Thomas employs three different count measures, as dependent variables, in a series of negative binomial regression analyses: the count of the number of maximal and substantial concessions (strong concessions); the number of any concessions (weak concessions); and the number of substantial and maximal political concessions (strong political concessions) granted to rebels. Reliance on ideological appeals has a positive association with every measure of concessions, but the relationship never reaches traditional levels of statistical significance. Thus, despite the prevailing wisdom that groups will be more successful when they recruit more heavily with ideological appeals, I do not find evidence that such groups are more likely to win any type of concessions (**Table A2**).

While these data provide more fine-grained information on the outcomes rebel groups experience than many other datasets, one possibility is that some idiosyncrasies of the Africaonly sample are driving the results. To ensure that this is not the case, I also replicate a study by Cunningham and Sawyer (2019), who examine how the method of selection for rebel leaders affects the probability that rebels enter negotiations with governments. Their data cover a global sample of rebel groups that were active during the period of 1989 to 2011. Specifically, I replicate the main series of logistic regression analyses conducted by Cunningham and Sawyer in which the outcome variable is a dichotomous indicator of whether a rebel group and government were involved in negotiations during a given year. Across all models, reliance on ideological recruitment appeals, relative to material incentives, has a negative association with the probability of negotiations occurring in every model, though the relationship is only statistically significant in one model (**Table A3**).

Thus, across the two replicated studies, mobilization around social endowments does not have a clear effect on rebel group outcomes. I find no evidence in support of the conventional wisdom that rebel groups will be more successful if they rely more on ideological appeals than material incentives for recruitment.

Next, I reconduct the main analysis, employing alternative measures of the main explanatory variable. First, I used a collapsed version of the main ordinal indicator, that is a simplified ordinal measure of whether the group recruited only with material appeals (0), any mixture of both ideological and material appeals (1), or only with ideological appeals (2). As the results show, there is not a statistically significant association between this explanatory variable and any of the outcomes of interest (**Table A4**).

Additionally, RAID contains a three-point ordinal indicator of the degree of confidence in the coding of the main measure of reliance on ideological appeals. This variable specifies whether there was low (1), moderate (2), or high (3) confidence in the coding. I rerun the main analysis, excluding all observations that received the lowest level of certainty in the coding of the main explanatory variable. I continue to find no evidence of a statistically significant relationship between reliance on ideological recruitment appeals and any of the types of rebel group outcomes (**Table A5**).

Next, I consider the possibility that specific ideologies are driving the results. Indeed, it is possible that reliance on ideological appeals still helps more moderate rebels, even if more extreme militants do not benefit from such strategies. Indeed, extreme ideological positions might almost always undermine rebel success because these beliefs make it difficult to generate sufficient civilian support to be successful. However, groups with more moderate and popular goals could benefit from having more ideologically committed recruits.

To ensure that specific ideologies are not driving the results, I take a couple different approaches. First, I reconduct the main analysis, and remove the control variables measuring whether groups have radical Islamist or left-wing ideologies. Across all models, I continue to not find a statistically significant association between reliance on ideological appeals and all of the types of outcomes (**Table A6**).

Second, I rerun the main analysis twice; once omitting radical Islamist groups (**Table A7**), and once omitting left-wing organizations (**Table A8**). In the tests in **Table A6**, the ideology-based controls variables are simply not included. In these models, groups with these ideologies are actually excluded from the analyses.

Across both sets of tests, reliance on ideological appeals still does not have a statistically significant association with the probability of earning negotiated settlements, achieving total victory over government forces, or ending through low levels of activity. However, in one of the models in which radical Islamist groups are excluded, and in both models where left-wing groups are omitted, reliance on ideological recruitment appeals is associated with a decreased probability of total defeat by government forces, and this relationship is statistically significant. This provides some evidence that, among a subset of rebel organizations, ideological-based recruitment strategies might help rebels stave off government defeat.

However, across a variety of alternative tests, I still do not find evidence for the conventional wisdom that rebel groups will be more successful when they rely more heavily on ideological appeals than material incentives for recruitment.

	(1)	
	Negotiations	
Ideological Recruitment	0.0764	
	(0.112)	
Number of Successful Terror Attacks _(t-1)	0.156***	
	(0.0388)	
Rebel Relative Strength	0.834***	
	(0.225)	
Main Group	0.458	
	(0.410)	
Explicit Support	0.714*	
	(0.406)	
Regime Type	0.165***	
	(0.0524)	
ln(Deaths)	-0.105	
	(0.130)	
Number of Conflict Episodes	-0.471	
	(0.315)	
Episode Duration	0.00580***	
	(0.00213)	
Territorial War	-0.598	
	(0.520)	
Ethnic War	1.395***	
	(0.534)	
Third-Party Mediation	2.034***	
	(0.600)	
Number of Rebel Groups	0.337*	
	(0.199)	
ln(GDP)	0.598***	
	(0.157)	
Constant	-19.63***	
	(4.148)	
	1 000	
Observations Robust standard errors in parentheses	1,983	

Table A1: Effects of Reliance on Ide	logical Anneals on Nego	tiations (Thomas 2014)
Table A1. Effects of Kenance on fue	nogical Appeals on Nego	(1 nomas 2014)

Robust standard errors in parentheses

	(1) Number of Concessions (Strong)	(2) Number of Concessions (Weak)	(3) Number of Political Concessions (Strong)
Idealogical Deamitment	0.124	0.0430	0.126
Ideological Recruitment	0.124 (0.238)	(0.217)	(0.211)
Number of Successful Terror	(0.238)	(0.217)	(0.211)
Attacks _(t-1)	0.0618***	0.0648***	0.0430***
	(0.00532)	(0.0115)	(0.00723)
Relative Rebel Strength	1.021***	0.962***	0.920***
U	(0.330)	(0.309)	(0.303)
Main Group	-0.0568	-0.158	-0.152
-	(0.506)	(0.480)	(0.593)
Explicit Support	0.297	0.383	0.266
	(0.452)	(0.450)	(0.482)
Regime Type	0.0850	0.0671	0.0144
	(0.0850)	(0.0833)	(0.0803)
ln(Deaths)	0.187**	0.242***	0.205*
	(0.0847)	(0.0836)	(0.109)
Number of Conflict Episodes	-0.442	-0.447	-1.415*
	(0.272)	(0.274)	(0.752)
Episode Duration	0.00448	0.00907**	0.00381
	(0.00426)	(0.00360)	(0.00383)
Third-Party Mediation	0.876	1.035*	1.153**
	(0.615)	(0.590)	(0.484)
Territorial War	0.0220	0.122	0.735
	(1.011)	(0.886)	(1.041)
Ethnic War	0.247	0.498	0.409
	(0.516)	(0.476)	(0.492)
Number of Rebel Groups	0.136	-0.0861	0.100
	(0.245)	(0.206)	(0.244)
ln(GDP)	0.244	0.309	0.196
	(0.221)	(0.212)	(0.226)
Constant	-12.26**	-13.53***	-10.80**
	(4.914)	(4.765)	(5.063)
Ln(alpha)	2.054***	1.608***	1.938***
	(0.282)	(0.344)	(0.341)
Observations	1,983	1,983	1,983

Table A2: Effects of Reliance on Ideological Appeals on Concessions (Thomas 2014)

Robust standard errors in parentheses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Ideological recruitment	-0.113 (0.0807)	-0.0302 (0.0852)	-0.0956 (0.0790)	-0.0178 (0.0837)	-0.134* (0.0809)	-0.0486 (0.0859)	-0.0474 (0.0856)
Local selection process	0.507* (0.282)	0.576* (0.295)					
Orientation	-0.801** (0.379)	-0.917** (0.401)					
Election			0.770** (0.372)	0.940** (0.385)			0.778** (0.395)
Cadre			0.185 (0.621)	0.0861 (0.643)			-0.110 (0.631)
Inherited			0.651 (0.511)	0.773 (0.549)			0.678 (0.565)
Founder					-1.224*** (0.475)	-1.164** (0.464)	-1.038** (0.472)
Split					-0.155 (0.634)	-0.355 (0.718)	-0.250 (0.726)
Merged					-1.566** (0.702)	-2.428*** (0.844)	-2.299** (0.849)
Third Party					1.642* (0.927)	1.835** (0.893)	2.029** (0.900)
ln(State troops)	-0.452*** (0.0738)	-0.358*** (0.0889)	-0.443*** (0.0737)	-0.350*** (0.0877)	-0.464*** (0.0743)	-0.378*** (0.0897)	-0.374** (0.0910
ln(Rebel troops)	0.298*** (0.0608)	0.304*** (0.0639)	0.307*** (0.0605)	0.314*** (0.0641)	0.310*** (0.0617)	0.317*** (0.0648)	0.306** (0.0651
External intervention in conflict	-0.661** (0.268)	-0.569** (0.275)	-0.642** (0.264)	-0.560** (0.271)	-0.718*** (0.273)	-0.634** (0.282)	-0.652** (0.280)
ln(Battle deaths) - best estimate	0.0911* (0.0502)	0.0824 (0.0537)	0.0989** (0.0495)	0.0860 (0.0533)	0.0825 (0.0505)	0.0766 (0.0544)	0.0743 (0.0542)
Ethnic fractionalization		0.296 (0.430)		0.290 (0.431)		0.292 (0.437)	0.313 (0.437)
ln(Population)		-0.192** (0.0924)		-0.195** (0.0925)		-0.183** (0.0923)	-0.193** (0.0940)
ln(GDPpc)		-0.255* (0.135)		-0.281** (0.137)		-0.229* (0.136)	-0.276** (0.138)
Legal political wing		0.462 (0.306)		0.441 (0.305)		0.487 (0.308)	0.495 (0.310)
Democracy		0.721*** (0.272)		0.772*** (0.272)		0.680** (0.271)	0.736*** (0.277)
t	-0.0322 (0.0504)	-0.0335 (0.0524)	0.0143 (0.0446)	0.0186 (0.0466)	-0.0477 (0.0501)	-0.0534 (0.0513)	-0.0308 (0.0531)
t^2	0.00138 (0.00246)	0.00174 (0.00253)	-0.000593 (0.00226)	-0.000459 (0.00233)	0.00199 (0.00245)	0.00251 (0.00250)	0.00164 (0.00255
t3	-1.06e-05	-1.69e-05 (3.26e-	1.21e-05 (2.96e-05)	8.32e-06 (3.03e-	-1.72e-05	-2.49e-05 (3.24e-	-1.54e-0
Constant	(3.18e-05) 1.598*	05) 3.760**	(2.96e-05) 1.048	05) 3.426**	(3.17e-05) 1.883**	05) 3.839**	(3.27e-05 4.164**
Constant	(0.950)	(1.599)	(0.903)	(1.606)	(0.960)	(1.622)	(1.638)
Observations	866	850	866	850	866	850	850

Table A3: Effects of Reliance on Ideological Appeals on Negotiations (Cunningham and Sawyer 2019)

Robust standard errors in parentheses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Peace A	Agreement	Rebe	l Victory	Gov. V	Victory	Fizzle	ed Out
Ideological Recruitment	1.183	1.341	1.793	1.268	0.897	0.884	0.944	0.874
	(0.224)	(0.274)	(0.964)	(0.449)	(0.382)	(0.469)	(0.132)	(0.131)
Multi-Ethnic Rebels	0.955	1.038	0.826	0.431	0.404*	0.573	1.235	1.195
	(0.212)	(0.259)	(0.486)	(0.329)	(0.202)	(0.305)	(0.174)	(0.184)
Radical Islamist	0.547*	0.390***	0.380	3.28e-07***	1.757	3.536*	1.060	1.158
	(0.174)	(0.142)	(0.387)	(2.84e-07)	(0.960)	(2.340)	(0.179)	(0.236)
Left-Wing	0.754	0.586*	2.147	3.454*	0.829	0.736	1.019	1.096
	(0.182)	(0.168)	(1.411)	(2.328)	(0.458)	(0.596)	(0.163)	(0.194)
Secessionist Aims	0.993	0.708	0.128*	0.158*	0.447	0.534	1.195	1.390
	(0.231)	(0.184)	(0.140)	(0.166)	(0.224)	(0.290)	(0.201)	(0.297)
Relative Rebel Strength	1.490***	1.570***	2.730**	6.483***	0.934	1.042	0.514***	0.437***
	(0.179)	(0.244)	(1.085)	(4.064)	(0.243)	(0.310)	(0.0848)	(0.0953)
Natural Resource								
Exploitation	1.312	1.247	1.531	2.311	0.811	0.653	0.678***	0.732**
	(0.291)	(0.322)	(0.855)	(1.456)	(0.388)	(0.369)	(0.102)	(0.115)
Territorial Control	1.064	1.143	1.217	1.395	2.473**	3.649**	0.838	0.788
	(0.237)	(0.284)	(0.665)	(0.759)	(1.049)	(1.880)	(0.152)	(0.168)
Externally Supported Rebels	1.634**	1.526*	1.468	1.170	0.239***	0.194***	0.914	0.886
	(0.359)	(0.366)	(0.886)	(0.687)	(0.107)	(0.0967)	(0.142)	(0.142)
Polity2		1.048**		0.947		1.004		0.973*
		(0.0233)		(0.0490)		(0.0479)		(0.0150)
per capita GDP		1.110		0.895		0.813		1.005
		(0.100)		(0.326)		(0.130)		(0.0634)
Observations	382	314	382	314	382	314	382	314

Table A4: Reliance on Ideological Recruitment Appeals, Relative to Material Incentives, an	nd Rebel Outcomes (Narrower IV)
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Hazard ratios reported

Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Peace	Agreement	Rebe	Victory	Gov.	Victory	Fizzle	ed Out
Ideological Recruitment	1.050	1.147	1.283	1.040	0.882	0.769	1.009	0.994
	(0.0941)	(0.112)	(0.365)	(0.218)	(0.175)	(0.185)	(0.0660)	(0.0715)
Multi-Ethnic Rebels	0.945	1.004	0.824	0.432	0.361*	0.480	1.250	1.209
	(0.215)	(0.257)	(0.496)	(0.339)	(0.205)	(0.291)	(0.178)	(0.188)
Radical Islamist	0.532*	0.348***	0.346	1.27e-07***	2.123	5.145**	1.065	1.214
	(0.172)	(0.130)	(0.351)	(1.06e-07)	(1.235)	(3.912)	(0.185)	(0.247)
Left-Wing	0.741	0.531**	1.913	3.179*	0.730	0.577	1.053	1.180
	(0.184)	(0.161)	(1.317)	(2.097)	(0.388)	(0.441)	(0.173)	(0.211)
Secessionist Aims	1.022	0.673	0.132*	0.185	0.456	0.611	1.132	1.300
	(0.246)	(0.182)	(0.146)	(0.223)	(0.237)	(0.360)	(0.199)	(0.299)
Relative Rebel Strength	1.486***	1.565***	2.833***	6.221***	0.833	0.918	0.510***	0.430***
	(0.182)	(0.245)	(1.146)	(3.790)	(0.223)	(0.272)	(0.0893)	(0.104)
Natural Resource								
Exploitation	1.233	1.139	1.480	2.185	0.845	0.672	0.707**	0.790
	(0.283)	(0.306)	(0.803)	(1.280)	(0.444)	(0.408)	(0.107)	(0.123)
Territorial Control	1.036	1.114	1.199	1.334	3.069**	5.627***	0.842	0.794
	(0.239)	(0.290)	(0.719)	(0.820)	(1.416)	(3.472)	(0.154)	(0.174)
Externally Supported Rebels	1.688**	1.649**	1.515	1.148	0.212***	0.144***	0.896	0.854
	(0.390)	(0.413)	(0.937)	(0.754)	(0.109)	(0.0831)	(0.141)	(0.139)
Polity2		1.058**		0.942		1.007		0.970*
		(0.0243)		(0.0511)		(0.0551)		(0.0154)
per capita GDP		1.130		0.870		0.835		0.989
		(0.101)		(0.341)		(0.150)		(0.0644)
Observations	366	298	366	298	366	298	366	298

Table A5: Reliance on Ideological Recruitment Appeals and Rebel Outcomes (Excluding Low Certainty Observations)

Hazard ratios reported

Robust standard errors in parentheses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
	Peace A	Agreement	Rebel	Victory	Gov. V	Victory	Fizzle	Fizzled Out	
Ideological Recruitment	1.043	1.113	1.356	1.053	0.877	0.826	1.015	1.005	
	(0.0903)	(0.103)	(0.399)	(0.242)	(0.143)	(0.154)	(0.0638)	(0.0719)	
Multi-Ethnic Rebels	0.956	1.021	0.868	0.363	0.395*	0.558	1.229	1.175	
	(0.218)	(0.261)	(0.558)	(0.303)	(0.194)	(0.313)	(0.168)	(0.178)	
Secessionist Aims	1.134	0.829	0.115**	0.124**	0.460*	0.620	1.137	1.265	
	(0.254)	(0.203)	(0.121)	(0.127)	(0.217)	(0.369)	(0.187)	(0.280)	
Relative Rebel Strength	1.586***	1.758***	2.675***	5.565***	0.938	1.123	0.508***	0.426***	
	(0.181)	(0.259)	(0.942)	(2.964)	(0.199)	(0.284)	(0.0861)	(0.0987)	
Natural Resource									
Exploitation	1.217	1.128	1.588	2.441	0.847	0.728	0.694**	0.770*	
	(0.269)	(0.289)	(0.903)	(1.652)	(0.378)	(0.372)	(0.104)	(0.120)	
Territorial Control	1.133	1.257	1.580	1.730	2.086*	2.441**	0.846	0.802	
	(0.232)	(0.296)	(0.933)	(1.072)	(0.842)	(1.055)	(0.148)	(0.175)	
Externally Supported Rebels	1.617**	1.590**	1.485	1.532	0.248***	0.195***	0.921	0.900	
	(0.350)	(0.369)	(0.889)	(0.950)	(0.109)	(0.0957)	(0.139)	(0.141)	
Polity2		1.043**		0.947		1.006		0.974*	
		(0.0219)		(0.0537)		(0.0478)		(0.0155)	
per capita GDP		1.025		0.818		0.882		1.019	
		(0.0809)		(0.273)		(0.130)		(0.0589)	
Observations	382	314	382	314	382	314	382	314	

Table A6: Reliance on Ideological Recruitment Appeals and Rebel Outcomes (Excluding Controls for Ideology)

Hazard ratios reported Robust standard errors in parentheses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Peace A	Agreement	Rebel	Victory	Gov. V	Victory	Fizzled Out	
Ideological Recruitment	1.073	1.158	1.196	1.060	0.795	0.690*	1.027	0.999
	(0.0979)	(0.111)	(0.292)	(0.207)	(0.142)	(0.148)	(0.0716)	(0.0763)
Multi-Ethnic Rebels	1.223	1.272	0.711	0.419	0.304**	0.400	1.093	1.035
	(0.286)	(0.336)	(0.456)	(0.333)	(0.170)	(0.249)	(0.192)	(0.196)
Left-Wing	0.718	0.582*	2.164	3.349*	0.690	0.610	1.042	1.030
	(0.177)	(0.176)	(1.559)	(2.182)	(0.362)	(0.416)	(0.173)	(0.185)
Secessionist Aims	1.156	0.809	0.128*	0.157*	0.308**	0.419	1.222	1.346
	(0.286)	(0.225)	(0.142)	(0.170)	(0.167)	(0.272)	(0.242)	(0.345)
Relative Rebel Strength	1.532***	1.582***	2.881**	6.520***	0.799	0.955	0.507***	0.429***
	(0.199)	(0.262)	(1.219)	(4.085)	(0.221)	(0.276)	(0.102)	(0.111)
Natural Resource								
Exploitation	1.585**	1.303	1.288	2.246	0.917	0.703	0.627***	0.709*
	(0.367)	(0.363)	(0.755)	(1.327)	(0.493)	(0.449)	(0.110)	(0.132)
Territorial Control	0.888	1.076	1.363	1.345	2.816**	3.803**	0.922	0.855
	(0.205)	(0.281)	(0.833)	(0.796)	(1.319)	(2.113)	(0.176)	(0.205)
Externally Supported Rebels	1.263	1.179	1.349	1.199	0.333**	0.280**	0.913	0.947
	(0.292)	(0.298)	(0.856)	(0.726)	(0.170)	(0.148)	(0.166)	(0.180)
Polity2		1.045*		0.946		1.021		0.980
		(0.0250)		(0.0502)		(0.0584)		(0.0174)
per capita GDP		1.049		0.898		0.846		1.040
		(0.0959)		(0.327)		(0.185)		(0.0745)
Observations	298	255	298	255	298	255	298	255

Hazard ratios reported Robust standard errors in parentheses

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Peace A	greement	Rebel	Victory	Gov. V	Victory	Fizzle	ed Out
Ideological Recruitment	1.109	1.192	1.352	1.064	0.713*	0.662*	0.968	0.964
	(0.119)	(0.137)	(0.404)	(0.270)	(0.140)	(0.148)	(0.0889)	(0.101)
Multi-Ethnic Rebels	0.957	1.071	1.432	0.892	0.403*	0.538	1.155	1.071
	(0.226)	(0.289)	(1.131)	(0.742)	(0.208)	(0.308)	(0.192)	(0.190)
Radical Islamist	0.462**	0.313***	0.302	5.65e-08***	2.542	5.235**	1.148	1.301
	(0.153)	(0.131)	(0.300)	(6.82e-08)	(1.537)	(3.605)	(0.208)	(0.276)
Secessionist Aims	0.802	0.525**	0.221	0.123	0.571	0.555	1.336	1.699*
	(0.228)	(0.168)	(0.256)	(0.158)	(0.334)	(0.347)	(0.292)	(0.479)
Relative Rebel Strength	1.427***	1.437**	2.814**	7.648***	0.794	0.932	0.597***	0.546***
	(0.193)	(0.243)	(1.314)	(5.948)	(0.191)	(0.254)	(0.101)	(0.112)
Natural Resource								
Exploitation	1.253	1.287	1.763	0.988	0.924	0.735	0.661**	0.754
	(0.305)	(0.385)	(1.152)	(0.584)	(0.461)	(0.420)	(0.117)	(0.139)
Territorial Control	0.975	1.064	0.891	0.667	3.346***	6.380***	0.854	0.715
	(0.256)	(0.299)	(0.705)	(0.325)	(1.430)	(3.300)	(0.168)	(0.147)
Externally Supported Rebels	1.937***	1.704*	0.704	0.457	0.0896***	0.0753***	1.003	1.007
	(0.493)	(0.466)	(0.439)	(0.318)	(0.0576)	(0.0582)	(0.167)	(0.169)
Polity2		1.062**		1.080		1.056		0.943***
		(0.0282)		(0.0986)		(0.0609)		(0.0202)
per capita GDP		1.150		2.237		0.722		1.017
		(0.130)		(1.493)		(0.156)		(0.0759)
Observations	284	229	284	229	284	229	284	229

Table A8: Reliance on Ideological Recruitment Appeals and Rebel Outcomes (Excluding Left-Wing Groups from the Sample)

Hazard ratios reported Robust standard errors in parentheses