Do strategic communications predict rebel behavior in civil wars? Evidence from militant group manifestos

Michael Becker*

September 2022

Abstract

How well do statements of political positions reflect actors' subsequent behavior in civil wars? Existing research on legislative dynamics indicates a relationship between elected officials' expressions and voting behavior, but it is unclear whether this relationship generalizes to other domains. In this paper, I examine the relationship between the sentiments expressed in manifestos released by militant groups involved in civil wars and the sources of revenue that such organizations opt for. To the extent that existing research on civil wars considers revenue sources, it is largely as an independent variable that influences the probability and nature of conflict occurrence. I propose to re-conceptualize funding decisions as *outcomes* of militants' efforts to navigate tradeoffs within their political environments that may be reflected in their formal communications. In particular, I examine whether rebel groups collect revenue directly from constituents, indirectly through means such as drug sales, or via transfers from foreign governments. Using text analysis on an original corpus of manifestos, I derive ideological position estimates for a sample of militant groups. I then combine multiple sources of data on rebel revenue gathering to assess the relationship between the positions taken and revenue-gathering decisions. In partial support of my hypotheses, I find that groups whose manifestos reflect a more international orientation do indeed tend to take more foreign contributions. The relationship between stated positions and domestic forms of funding is more ambiguous. The results have implications both for future policymaking and scholarship on militant group behavior.

1 Introduction

Rebel groups rely on a wide variety of revenue sources. On the one hand, many groups extract income directly from civilians. The Basque separatist group ETA, like other Marxist groups, extorted "revolutionary taxes" from businesses and civilians, while the Taliban have levied *zakat*, an Islamic tax, on civilians in Afghanistan. On the other hand, other groups smuggle, harvest or sell drugs, diamonds, oil, precious metals, or relics, to name a few commodities. In its heyday, the Sunni militant group Islamic State trafficked in ancient relics looted from their territory in Iraq and Syria. Finally, still other organizations receive weapons, training, and funds from external sponsors; the Lebanese group Hezbollah, for example, has been linked to Iran.

What explains this variation in how rebels fund their efforts in civil wars? Choices of rebel revenue streams, on the surface, can seem puzzling. In particular, weaker groups that need to secure public support often lean heavily on extraction from civilians. In the case of ETA, a small group that lacked a broad base of public support, extortion demands to small businesses ran from tens to hundreds of thousands of euros. And other Marxist groups have required similarly high contributions from non-affluent and discontented civilians. Meanwhile, more capable groups, which as aspiring future states need to construct tax apparatuses to build state capacity and legitimacy, often continue to use illicit sources of funding. The Islamic State, for example, continued to rely heavily on relics sales even as it consolidated control over territory in the Middle East in the mid-2010s and had access to a broad tax base. Finally, the groups that rely on external sponsors for support, such as Hamas, often continue to burden civilians with exorbitant levels of extraction, undercutting public support for their cause.

Insurgents face tradeoffs when opting for different funding sources. They may extract revenue directly from civilians, through extortion or proto-governmental taxation. They may seek to predate on existing industries such as mineral extraction or drug cultivation, which impact civilians, but only indirectly. Or they may solicit aid from an external state sponsor. The choice to opt for any of these three potential sources of revenue is conceivably reflective of how they intend to manage the acute pressures of civil wars. Suppose a group chooses to extract resources directly from civilians in the form of taxation, either informally or institutionally. In so doing, they obtain a regular source of income, but risk alienating the very groups whose support they depend on in the long run. They may, alternatively, turn to external sponsors. As a result they relinquish a degree of control over operations to actors who do not perfectly share their

interests, but also avoid burdening their local base of support with the costs of war. Finally, they may engage in criminal activities, such as smuggling, which, similar to accepting sponsorship, permits them not to impose war costs on their supporters, but entails other pitfalls. Criminal activities require large initial investments (e.g., organizing distribution networks), provide volatile returns, and do not necessarily advance processes of legitimation and state formation that rebel groups target in the long run.

In this paper, I examine whether the political orientations that violent organizations express in their formal communications can be illustrative of how they attempt to navigate between the stakeholders of a conflict: local constituents, rival organizations, incumbent governments, and other countries, to name a few. The focus on ideological expressions as an explanatory variable is not uncontroversial: presumably, such expressions are fickle, strategic, and endogenous to other features of rebels' environments. However, I argue that this is precisely why they are worthy of focus—they do not need to be "authentic" articulations of preferences to reveal something about priorities, constraints, and—therefore—likely behavior. Expressions of ideology, particularly formalistic ones such as those I focus on in this article, can be thought of as attempts to credibly commit to align with certain other actors and possibly to foreclose certain sources of support seen as objectionable to sought-after audiences. It is not impossible to change one's ideology, but it is difficult. To be sure, groups do change over time, but the historical record suggests that, generally, durable changes come more in the form of tactics rather than goals and grievances.

One manifestation of behavior that ideological expressions may shed light on is the choice of revenue sources. Organizations may express solidarity with observers' beliefs to solicit donations, or to justify the imposition of local extractive measures. Alternatively, political statements by rebel organizations could be precipitated by internal dynamics, or efforts to position themselves on dimensions other than financing. Therefore, to help understand the relationship between communications and funding decisions, I collect an original corpus of rebel group manifestos, which describe organizations' overall philosophies, their grievances and objectives, and their plans for achieving them. Again, my claim is not that manifestos reveal the primitive preferences of membership, or cause particular patterns of behavior. Rather, they are strategic documents that may *reflect* likely behavior. In American politics, for example, some scholars have identified a connection between sentiments expressed on social media and legislators' voting behavior, but this need not imply that such articulations are "genuine" (Shapiro et al. 2012). From the corpus of manifestos, I derive an original text-based estimate of

insurgents' stated ideologies to help explain their funding decisions. My interpretation of the estimates suggests that the dimension of interest reflects internationally- versus locally-oriented organizations, rather than the traditional left-right role-of-government ordering familiar to scholars of European and American political parties.

In partial support of the hypotheses advanced below, I find that groups whose manifestos evince a more international orientation do indeed tend to accept more funding from foreign governments, and correspondingly rely less on exclusively domestic forms of revenue, or on a mixture of foreign and domestic sources. However, the positions expressed in manifestos do not appear to exhibit a robust association with specific types of *home-country* revenue. The theory and evidence presented suggests that strategic communications are partially indicative of how groups weigh the tradeoffs between the three principal means of financing their campaigns: accepting foreign sponsorship; participating, illicitly or legally, in economic production or distribution; and extracting resources directly from constituents, through taxation or extortion. More broadly, the findings of this paper suggest that further examinations of formal communications by non-state actors in civil wars is a promising avenue for future research.

The remainder of the paper proceeds in the following manner. I begin by reviewing the relevant literature on rebel funding decisions. I then present and discuss the textual analysis of the manifesto corpus. Next, I introduce the data and discuss the results on funding outcomes as a function of the ideological position estimates and other variables. An illustration of the relationship depicted in the data follows in a qualitative analysis of the Free Aceh Movement. The final section discusses the implications of the findings for future research.

2   Existing literature

Previous literature has examined some aspects of the relationship between the provenance of rebel funds and the nature of civil wars. To begin with, there is a large body of research on the link between natural resource endowments and civil war onset and duration. Collier and Hoeffler (2004), for example, find empirical support for "greed"-based explanations for civil war, while "grievances," they argue, have little explanatory power. In a review article, Ross (2006) documents an association between the likelihood of civil war and the presence of certain types of natural resources, namely "contraband," a finding that also emerges in Buhaug et al. (2009). In general, while many studies

4

have been plagued by issues like measurement error and endogeneity (Ross 2006), there appears to be a robust association between conflict and at least certain types of natural resources (Ross 2004).

Other studies characterize revenue sources in ways different from my approach, which distinguishes between *direct* extraction from civilians, and *indirect* forms of fundraising, such as drug smuggling or human trafficking. Here the distinction captures the fact that while indirect methods may impose externalities on civilians, they do not burden them directly. Direct extraction reflects that from the civilian's point of view, "all taxation is theft," and it matters little—in a financial sense—whether it is done by a government bureaucrat with a stamp or by a guerrilla going door-to-door with an AK-47.

Most studies, however, differentiate "crime" from "legitimate" activities, focusing on normative labels rather than economic incidence. Freeman (2011), for example, argues for a typology of four sources: state sponsorship, illegal activity, legal activity, and popular support. Conrad et al. (2019) distinguish between the production and smuggling of natural resources, finding that groups that use smuggling fare better in civil wars. Their argument relates to groups' ability to resist government repression; yet a long tradition of qualitative and quantitative evidence indicates that local public support is also of paramount importance in explaining the duration and outcome of civil wars (e.g., DeNardo 2014). In this vein, another relevant current of research examines how resource endowments—internal and those provided by sponsors—affect groups' tactical decisions, and in particular their treatment of civilians. For example, Beardsley and McQuinn (2009) find that Tamil groups in Sri Lanka that received external support were less dependent on the population and more likely to target civilians and less likely to participate in peace talks. Walsh et al. (2018) provide a similar cross-group finding. Weinstein (2006) argues that groups are more likely to target civilians if they don't need to rely on them for economic extraction.

In general, most studies take "greed"-based variables as mostly exogenous, rather than as outcomes in civil wars. That is, most studies assume that groups use, say, oil, if and only if oil is to be found in their territory. Admittedly, certain types of indirect revenue sources—such as oil- or gold-mining—are not available in every conflict setting. But for groups that need to avoid overburdening civilians with predatory taxes, there are almost always other potential sources of revenue: human trafficking or drug smuggling, for example, are almost always options for unscrupulous organizations. Consider as well a more mundane example: Somalia is one of the poorest countries in the world,

with a largely agrarian economy and few developed industries. Lacking rich local elites to extort, or gold or oil to expropriate, the organization al-Shabaab has nevertheless managed to profit from the smuggling of charcoal made from Somali acacia trees, which are prized for use in hookah, a popular method of ingesting tobacco.

Groups' decisions of how to fund their campaigns are driven by external forces like the availability of natural resources, but also by the interaction between their own preferences and the citizens they embed themselves within. I thus conceive of revenue sources as, at least in part, an outcome of a constellation of variables, one of which is decisions made by militant groups under constraints. In one of the few exceptions to the tendency to consider funding sources as exogenous, Revkin (forthcoming) examines rebel decision-making with respect to revenue sources in the context of the Islamic State's former "caliphate." Revkin finds that IS, though flush with resources from oil and relics sales, continued to rely on direct extraction. Revkin argues that these taxes were obligatory under the form of Islam practiced by IS, and also served to limit desertion and out-migration.

To turn to the international dimension of civil wars, strategic interaction between a sponsor and a rebel group has typically been analyzed as a binary principal-agent problem. Salehyan et al. (2011) argue that moderately strong groups with transnational constituencies are most likely to receive external support. Popovic (2017) finds that decentralized groups are more likely to defy sponsors' wishes. Beardsley and McQuinn (2009) find that Tamil groups in Sri Lanka that received external support were less dependent on the population, more likely to target civilians and less likely to participate in peace talks. Finally, Salehyan et al. (2014) argue that rebels with access to foreign support commit more atrocities because they rely less on civilian support.

Existing studies, broadly speaking, have examined the classic pathology of principal-agency in this substantive context: how can the sponsor induce the rebels to conduct themselves according to the sponsor's interests? There is, however, a more fundamental question: knowing that they *cannot* perfectly control militant groups that operate opaquely, often at great distance, and in conflict zones in which they are not the dominant actor, why do sponsors sponsor at all? Extant research points to international rivalries (often in the binary environment of the Cold War), regime type, and ethnic ties as explanations for foreign sponsorship (Davis and Moore 1997, Saideman 2002, Akcinaroglu and Radziszewski 2005, Salehyan 2010, Nome 2013). To paraphrase Clausewitz, in these studies, sponsorship is a continuation of international rivalry by other means. Many of these studies, however, consider only the benefits of sponsorship versus direct

conflict with a rival. Of course, sponsorship is cheaper, in material terms, but also entails risks. There is the obvious agency problem of relying on a rebel group to advance the sponsor's goals, but there are also political risks in being associated with insurgents. The rebels might have goals contrary to those of the sponsor's domestic political constituency; they might use extreme or indiscriminate tactics; or the sponsor might suffer reputational consequences for using its limited resources in a foreign conflict. On the other side, rebels create agency and reputational problems for themselves by accepting foreign contributions; but may find such risks worthwhile if altenatives are lacking.

Another relevant strand of literature relates to how rebels fund their campaigns in light of the tension between the demands of war and public support. In many conflict zones, rebels compete for rule not just with the government, but with other militant groups. In such saturated environments, the demands of war and the low probability of survival can lead to "roving bandit" behavior (Olson 1993). Yet such behavior also undermines public support, a sine qua non of long-term success in civil wars (e.g., DeNardo 2014).

I argue that, because manifestos are formal, sticky declarations of priorities and philosophies, they can offer insight into how militant groups intend to manage the tradeoffs involved in opting for different forms of support. Unfortunately, the greed-grievance debate over the causes of civil war (e.g., Collier and Hoeffler 2004, Ross 2004, Ross 2006) has limited attention on how ideological expressions might shed light on rebel tactics. One possibility is that consonance between sponsor and rebel ideologies can help rebels commit to being faithful agents. On the other hand, the political orientation of civilians living under militant rule is likely important in determining how tolerant they are of predatory taxation, and therefore of whether and how organizations decide to set taxes.

3 Measuring political statements through text analysis

Broadly speaking, a central challenge in a number of subfields within political science is to assess and measure the influence of preferences. However, despite their likely importance in understanding political phenomena, as an object of study two key obstacles loom. For one thing, preferences are a relatively nebulous concept that is hard to define and separate from downstream factors like behavior. Second, even if a con-

sensus definition existed, preferences do not always lend themselves unambiguously to a measurement strategy.

As a result, many scholars have understandably chosen to focus on externally material factors to explain political phenomena. But without denying the importance of material drivers of behavior, or claiming that they are entirely divorced from ideational factors, it is fair to say that the latter have received comparatively little attention. Fortunately, this is not uniformly the case. A burgeoning literature, including seminal work by Budge and Laver, among others, has sprung up to use both hand-coding and computational methods to place political parties on an ideological scale by examining their manifestos, which describe philosophies of governance and policy goals (Budge et al. 1987, Laver and Budge 1992, Laver et al. 2003). Over time, for both methodological reasons and increased feasibility, text analysis has come to supplant hand-coding and expert surveys in studies of political party ideology. But while methodological approaches to analyzing ideology have matured significantly, their application has mainly been restricted to legislative politics—in particular, legislator and party ideal points. In this project, I aim to apply them to civil wars.

Specifically, I use text analysis to analyze an important, but understudied, aspect of civil wars: militant groups' expressed political positions. I build on existing scholarship that emphasizes material explanations for insurgent behavior by developing a more rigorous measure of ideological positioning. Of course, scholars have certainly not entirely dismissed ideology as an important reflection of the emergence and behavior of militant groups. However, most existing studies provide unsatisfying conceptualizations or measurements of ideology. In some cases political positions are coded using discrete, somewhat subjective categories such as "religious," "nationalist," or "leftist." Hou et al. (2019), for example, find that religious groups are more resilient since 2001. But even if there is no relevant omitted variable, several issues remain. For one thing, it is not clear that the categories are exhaustive, mutually exclusive, or even occupy the same dimension. For example, the People's Mojahedin of Iran historically melded its variant on Islamism with Marxism, with the relative emphases varying somewhat over time (Katzman 2001). The results also may not be robust to different category specifications or a continuous schema, and ad hoc sorting of groups into discrete categories inhibits discussion of mechanisms. In still other cases, "ideology" is used for ex post rationalization of puzzling empirical results. For example, Revkin (forthcoming) looks at revenue-gathering by the Islamic State. She finds that, even in its prime when sales of oil and relics were lucrative, IS continued to extract taxes directly from citizens.

Revkin explains this by arguing in part that these taxes were obligatory under the form of Islam practiced by IS.

Drawing on the example of scholars of political party platforms, I analyze a corpus of militant group manifestos to provide a more continuous, objective means by which to measure expressed positions. Most militant groups release manifestos that outline their goals and overall philosophy, and many are available online. However, they are not collected or analyzed systematically anywhere to my knowledge, so I collect a series of manifestos for dozens of militant groups. The idea is to use the manifestos as a novel way to understand variation in expressed positions based on the words insurgents themselves use, rather than the ad hoc classifications that are typical in the literature, or by merely inferring preferences from actions. I use Wordfish, which recovers a measure of ideological positioning using an expectation-maximization algorithm executed over text (Slapin and Proksch 2008, Proksch and Slapin 2009a).[1] One advantage of this approach is that it does not require ex ante definition of the relevant ideological dimension through reference texts, which is desirable since the heterogeneity of groups across time and space precludes restricting the space of relevant issues (and the resulting words used). For another thing, the algorithm coerces positions taken to one dimension, which while not without some loss of generality, makes comparison easier.

Wordfish is not capable of inter-language comparisons. To handle manifestos from different languages, I scrape them from the web in their original language and use machine translation (Google) to English (see the appendix for more details). In addition to radically increasing the project's feasibility, some research suggests that this approach is qualitatively comparable to expert human translation (Proksch et al. 2018; Windsor, Cupit, and Windsor 2019). To the extent this is true, the comparability across texts is purely driven by whether they all reflect a similar underlying ideological dimension. This is a difficult proposition to test, but militant manifestos seem just as likely to satisfy this condition as political parties of different countries. The latter are not always organized around the familiar size-of-government dimension, but often with a good amount of idiosyncrasy driven by local (or, in the case of European

---

[1]This approach is not without its limitations, which include sensitivity. Spirling and Denny (2018), for example, argue that which pre-processing steps are taken (e.g., stemming, removal of "stopwords") can have an effect on the resulting estimates. Proksch and Slapin (2009b), though, demonstrate the robustness of estimates to variation in the length of the corpora considered. The authors also document that agenda effects are increasingly present as the length of the time series considered increases. However, this is more of an issue when considering within-group change, which is not within the scope of this paper.

legislators, supranational) economic, historical, or cultural conditions. For example, using Wordfish, Proksch and Slapin (2010) find evidence that European Parliament members' speeches more reflect attitudes toward the EU and cross-national differences than mere left-right variation. Moreover, militant manifestos are almost universally organized around grievances against incumbent governments such as anti-colonialism or sectarianism, and often involve populist-style propositions for post-war governance. They are surprisingly similar across contexts. Figure 2 provides ideological positioning estimates for the groups in the sample.

For the purposes of the estimates recovered from the corpus, I argue that they reflect whether a militant group represents a parochial (mostly ethnic) constituency, versus a broader, more international current of thought like Marxism or Islamism. This is a function of the degree of lexical uniqueness across groups—the vocabulary that a Burundi Hutu group uses is unique, but Marxist groups have a more shared nomenclature. Wordfish discriminates between positions largely based on word frequencies (Slapin and Proksch 2008).

To provide some support for the interpretation I advance, in Figure 1 I divide groups into two categories based on the following criteria. In red are groups that either explicitly expressed cross-national ambitions (e.g., instituting a global caliphate, ending American imperialism, etc.), or carried out armed attacks against multiple governments. In blue are the organizations whose activity and communications reflected a more parochial focus by this measure. (Ambiguous or debatable cases are excluded). The classification is broadly in line with the measures recovered by Wordfish, despite some overlap. Indeed, some of the outlier cases serve to confirm the validity of the interpretation. For example, the group with the lowest score in the "international" column is an organization called Bundu dia Kongo (BDK). Because the group aspires to institute a state that spans several existing countries in Central Africa, they are coded as international according to the criteria I proposed above. However, the organization purports to represent the interests of the Kongo ethnic group, whose members simply happen to live in multiple states.

In the appendix, I also include a topic model that also suggests that the traditional left-right size-of-government dimension is of limited relevance compared with both ethnic verbiage and international ideological currents.

It is significant that this grouping is in severe tension with typical classifications of militants' ideology, which, unlike the present analysis, sharply differentiate Islamists and Marxists, for example. There are intuitive reasons, however, to think that it is the
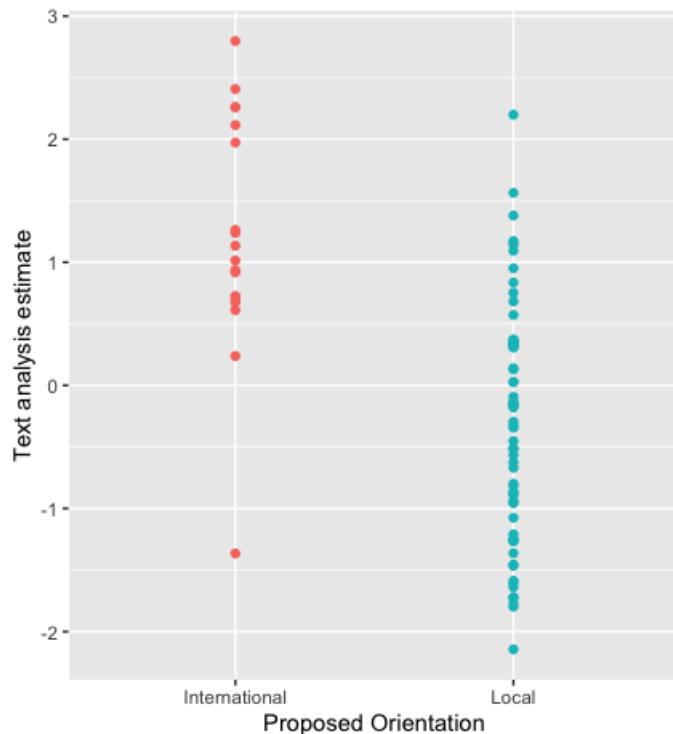
10

Figure 1: Ideological point estimates and proposed orientations

discrete groupings that are lacking. For example, often both Marxists and Islamists argue for increased provision of social services for the poor, and evince a concern for the welfare of persons in other countries that they consider sympathetic.

It is important to note, of course, that global ideological currents are not monolithic. Islamist organizations can be moderate or more orthodox, intra-national or intent on establishing a global caliphate. The same is true of Marxists, while nationalists can be inward-looking or territorially revanchist. With notable exceptions, however, groups with well-established local "brands" appear likelier to have more of a distinct phraseology, while internationally-oriented organizations share more of a nomenclature. For example, the four highest-scoring groups are all Maoist in orientation, while the four lowest-scoring all claim to represent ethnic groups. (The appendix contains a replication of the text analysis on a subsample excluding the two most extreme groups from each side of the spectrum; the results are similar.) Figure 2 provides a visual representation of the estimates from the model.

Figure 3 displays a smoothed distribution of the ideological estimates. Here there are two takeaways that will be relevant for understanding some of the empirical results:
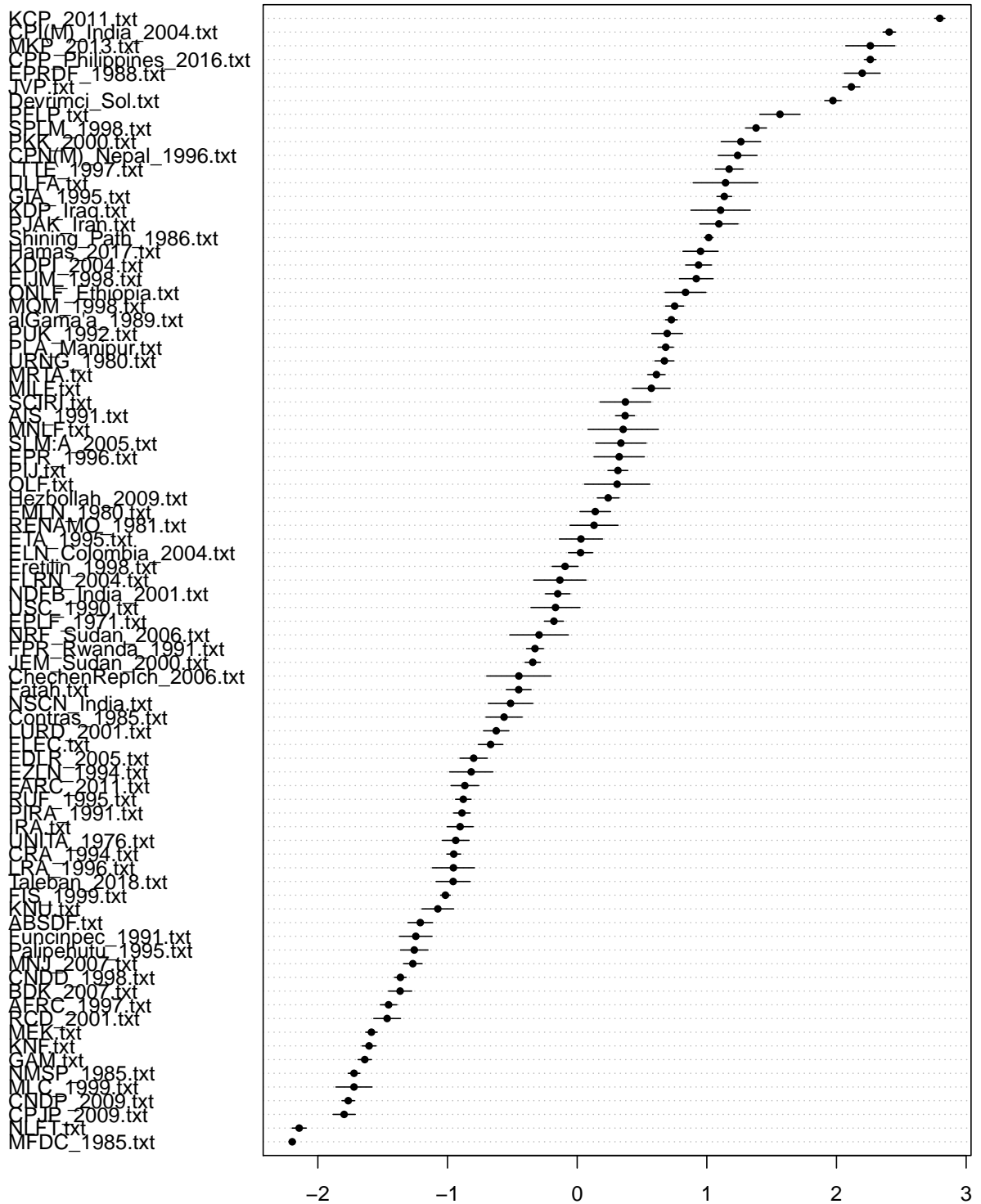
Figure 2: Ideological position point estimates and confidence intervals

first, the two peaks around −1 and 1; second, the sharp dropoff to the right of 1. Having outlined the text analysis, the next section provides a brief theoretical framework and hypotheses about the links between the ideological positioning dimension and funding behavior.
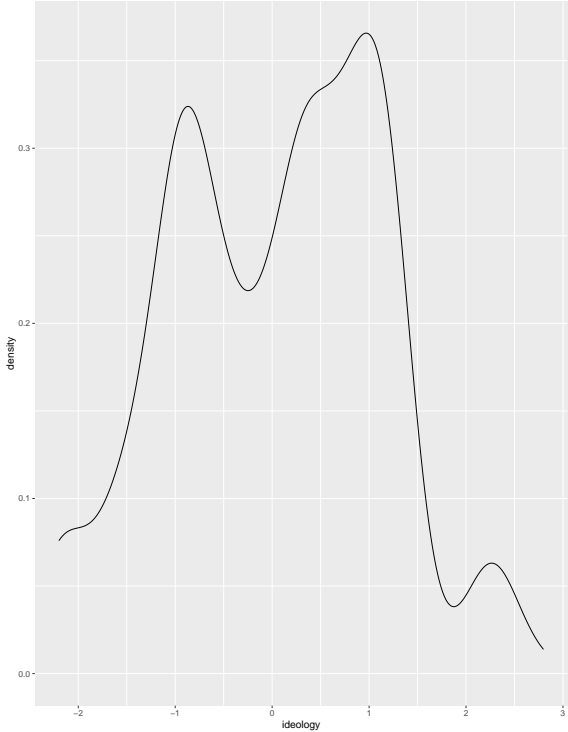

Figure 3: Probability distribution of ideological position estimates (kernel density estimate)

4   Theoretical considerations and hypotheses

In civil wars, militant groups in precarious positions must attempt to secure support— social, military, and financial—both to survive and to win. But given that the relevant actors disagree violently over policy, obtaining one stakeholder's support often entails alienating another. I argue that organizations' communications are indicative of how they intend to thread this needle.

I consider three broad means by which militant organizations can obtain financing. First, they may extract resources *directly* from local constituents. To be more specific, in the context of this paper, direct extraction includes activities like fully bureaucratized taxation, kidnapping for ransom, "protection fees," and the like. Alternatively they may

engage in *indirect* extraction, such as drug cultivation, sales, and smuggling; mining activities; human trafficking, etc. The key distinction is that while the latter type of extraction may affect local civilians, generally speaking it does so tangentially, for example via increasing pollution. This is not to suggest that such activities have less of an impact on civilians—good or bad—but rather that their effects are harder to perceive and connect with their perpetrators' actions.

Each provides advantages and disadvantages, but existing literature tends to lump them together as "criminal" activity, obscuring dynamics of rebel decision-making that could be relevant both analytically and on policy grounds. The first question of interest is: when do insurgent groups burden civilians directly through taxation, and when do they resort to illicit activity such as smuggling? I argue that groups aiming to extract revenue from domestic sources must exhibit consonance with their constituents' causes. This is not self-evident: it could be, for instance, that groups already viewed as sympathetic by locals (for example, because of a shared religious identity) are freer to deviate from the latter's preferences. But civil wars are precarious settings for militant groups. Local audiences are unlikely to countenance rebellion in the long term without persistent evidence that it is being carried out on their behalf. There exists evidence that militant leaders are aware of this dynamic. Fortna and co-authors (2018), for example, find that groups more beholden to local audiences for funding are less likely to use violence against civilians. These arguments lead to the following hypothesis:

Hypothesis 1: Groups scoring higher on the ideological dimension (i.e., with a more international orientation) are less likely to engage in direct extraction than groups with lower ideological scores.

Turning to the next possible form of revenue-gathering, indirect extraction has the advantage of exerting a lower direct economic incidence on civilians. However, there are other costs involved: for one thing, it does not necessarily contribute to bureaucratization and state formation, which rebels will need if they win the war. Finally, to the extent that indirect means are *perceived* as illicit (e.g., human trafficking), there are reputational costs that local actors may impose on groups engaging in such activities. For example, the FARC's involvement in the drug trade played a role in eroding local public support (Otis 2014). Moreover, indirect extraction takes time and investment—for example, the cultivation of drugs and the construction of distribution networks. I argue that organizations opting for such methods will exhibit more international orientations

in their communications, both because foreign powers are better able to provide the funds and networks required to profit from indirect methods of fundraising and because domestic support is less likely to be forthcoming. This latter argument is also consistent with Fortna et al. (2018), who find that groups reliant on "lootable"[2] resources are more likely to engage in terrorism—violence against civilians. These arguments lead to the second hypothesis:

Hypothesis 2: Groups scoring higher on the ideological dimension are more likely to engage in indirect extraction than groups with lower ideological scores.

Finally, groups can take money or resources from a foreign power. Here, again, there are tradeoffs. For one thing, with the possible exception of the Cold War period, generally sponsorship is not "free"—it comes with strings attached such as cessions of rights to local resources and, at a minimum, an expression of sympathy towards the sponsor's role in the world. While the latter condition, in particular, might seem costless, the perception that a militant group is nothing but a puppet of a foreign power may undermine recruitment and lead to resentment among the local population. On the other hand, often sponsors are capable of providing superior equipment and quantities of resources, and on a shorter timeline. This is no small dilemma for many organizations, which make revenue decisions in an unfavorable temporal setting where the resources needed to survive today can undermine the public support needed to win the war tomorrow. As a result, I argue that organizations evincing support for internationally-oriented causes will have a harder time collecting revenue from domestic constituents and will opt instead for foreign support:

Hypothesis 3: Groups scoring higher on the ideological dimension are more likely to accept foreign sponsorship than groups with lower ideological scores.

To recapitulate briefly, the interpretation of the text-based political dimension suggests that groups tend to commit—more or less—to a domestic audience or a foreign sponsor. For groups that do the former, I argue, the elasticity of local support for ethnic groups is relatively low—members of ethnic groups in conflict zones often have no alternative—so direct extraction could be less likely to alienate supporters. More-

---

[2]Lootable resources, by the authors' definition, would constitute a subset of the means I define in this paper as indirect extraction.

over, such extraction is often depicted (whether or not this is true) as taxes paid in exchange for public goods that civilians value like education. For such organizations, foreign sponsorship is also less likely to be forthcoming, given the gulf between the policy objectives of the organization on the ground and any potential patron.

On the other hand, groups that attempt more international appeals and obtain foreign funding are more likely to gain the capacity to set up extraction apparatuses like mines or mechanized drug cultivation systems—not to mention the distribution networks necessary to profit from them. They can also compete better for foreign support. And they are unlikely to want further to alienate local audiences with taxation, having less of a need for it.

5 Data

5.1 Dependent variables

I first combine existing data on rebel extraction levels (Rebel Contraband Database) (Walsh et al. 2018) with the UCDP External Support Dataset (Högbladh et al. 2011) on sponsorship by foreign states.

The Rebel Contraband Dataset (Walsh et al. 2018) contains dyad-year (e.g., 2009 Boko Haram-Nigeria) observations of rebel revenue sources from conflicts occurring between 1990-2012. Income sources are considered either resource-related, or non-resource related; within these categories, they are coded as extortion, smuggling, theft, or "booty futures"—claims on future natural resource flows. In essence, "extortion" mainly relates to funds extracted from producers and companies, while "theft" is from civilians. As Walsh et al. (2018) highlight, a key advantage of their approach is that income sources are coded based on actions taken by militant groups—not simply the mere existence of resources near them. I recode the variables to distinguish between resource-related activity (e.g., smuggling drugs across borders, human trafficking) and direct extraction from civilians (e.g., "protection fees" or taxation by proto-states). The variables are dichotomous, equalling one in a dyad-year when a strategy was adopted and zero otherwise. Importantly, multiple strategies can be used in any dyad-year.

These data are combined with Högbladh et al. (2011), a dataset covering external sponsorship. Each RCD observation is one dyad-year's bundle of resource sources categorized in a binary fashion,[3] while the unit of analysis of the External Support Data is

___

[3]There are a few weaknesses of the existing data that bear mentioning. First, I am using the

an organization-year instance of external support, again coded dichotomously based on whether a group had at least one sponsor in a given year. The temporal overlap covers the years 1990-2009, so I remove observations outside of this range. This approach has the advantage of muting the influence of the Cold War, a powerful, but highly era-specific, driver of rebel sponsorship in various proxy wars between the United States and Soviet Union. I also removed other types of observations not germane to the current analysis: *purely* non-state conflicts—that is, those that did not involve a government at all,[4] or those involving a state and a non-state organization based overseas.[5] Second, I culled observations related to interstate conflicts and sponsorship.

While the goal was to establish as comprehensive a compilation of possible funding streams as possible, it bears mentioning that the data available to my knowledge do not capture two important sources: diaspora contributions, and the siphoning of foreign aid intended for local economic development or humanitarian relief.

In one dyad-year, then, a militant organization can opt to engage in any combination of the following funding strategies: direct extraction from local civilians, indirect extraction through natural resources or drugs, or accepting funding from international patrons.

5.2 Independent variables

The independent variable of interest is the ideological position estimate, discussed above. Here I discuss important control variables. First, I control for GDP per capita in constant 2010 dollars (World Bank 2019) to address the possibility that organizations in richer countries have more opportunities for local extraction of revenue. Similarly, I control for natural resource endowments such as gold or valuable minerals (World Bank 2006).

Next, it is conceivably the case that, in addition to political considerations, potential sponsors condition their level of support on the physical feasibility of resource transfers. For example, states may find it easier to supply militant groups that operate in countries

---

"aggregated" form of the sponsorship data, which takes a value of one if *any* sponsorship occurs for an organization in a given year. Ideally, I would use the disaggregated data, which allow for multiple sponsors, but it is difficult to have an idea of the "denominator" of potential sponsors that *could have* offered funds, but didn't.

[4]See Appendix 1 for more details. For a dataset that covers non-state conflict, see von Uexkull and Pettersson (2018).

[5]E.g., between the United States and al-Qaida. In this case, the non-state organization is not making funding decisions *within* the country it is fighting.

that are more integrated into the global economy because they do not need to create logistical chains from scratch. I use the "ease of trade" variable from Brown et al. (2013) to account for this dynamic.[6]

Finally, another possibility is that stronger groups simply have more capacity to extract revenue at home and abroad, regardless of their political leanings. I use data from Hou et al. (2019) on peak size estimates for organizations to address this possibility.

6 Results

In this section, I subject the theoretical hypotheses outlined above to empirical scrutiny. The goal is to examine how variation in taxation and sponsorship, among other sources, is a function of insurgents' stated preferences.

6.1 OLS estimations

To begin with, I estimate Ordinary Least Squares regressions of the following form:

$$Y_{it} = \alpha\theta_i + \beta X_{it} + \mu_t + \eta_i + \epsilon_{it},$$

where Y_{it} is a rebel group i's decision to accept a particular type of revenue in a given year t—i.e., foreign sponsorship, direct extraction, or indirect extraction; θ_i is the text-based estimate of a rebel group's ideology; X_{it} is a vector of covariates; μ_t is a year fixed effect to absorb time-varying trends in revenue-gathering; η_i is a group fixed effect; and ϵ_{it} is the error term.

These results suggest that groups scoring higher on the ideological dimension tend to take more of *each* type of funding. This approach, however, considers methods in isolation to each other, whereas there are strong theoretical and empirical bases for believing that there are tradeoffs and dependencies between them. The next section studies a specification that allows for these possibilities.

---

[6]Data available at https://www.researchgate.net/publication/235249246_A_city_and_national_metric_measuring_isolation_from_the_global_market_for_food_security_assessment.

Table 1: OLS estimations

	(1) Direct Extraction	(2) Indirect Extraction	(3) Foreign Sponsorship
Ideology	0.953 (0.068)***	0.168 (0.006)***	2.797 (1.031)***
Log GDP per capita	0.169 (0.198)	-0.002 (0.006)	0.795 (0.300)***
Isolation	4.998 (0.398)***	3.437 (0.146)***	18.16 (6.691)***
Log resource endowment	-0.213 (0.048)***	-0.093 (0.015)***	-0.886 (0.331)***
Peak size	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)***
Adj. R-squared	0.92	0.98	0.79
Group fixed effects	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes
N	322	322	264

Note: Significance levels: * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. Robust standard errors in parentheses.

6.2 Multinomial logit estimations

In this section, I consider how ideology is associated with different combinations of revenue streams. In particular, in a given year, a rebel group can opt for one of the following strategies based on the permutations of foreign sponsorship, direct, and indirect: "none," "direct," "indirect," "mixed" (foreign sponsorship and either direct or indirect), "domestic" (both direct and indirect but not foreign), or "all."

Figure 4 shows the relative prevalence of different forms of rebel revenue between 1990-2009.
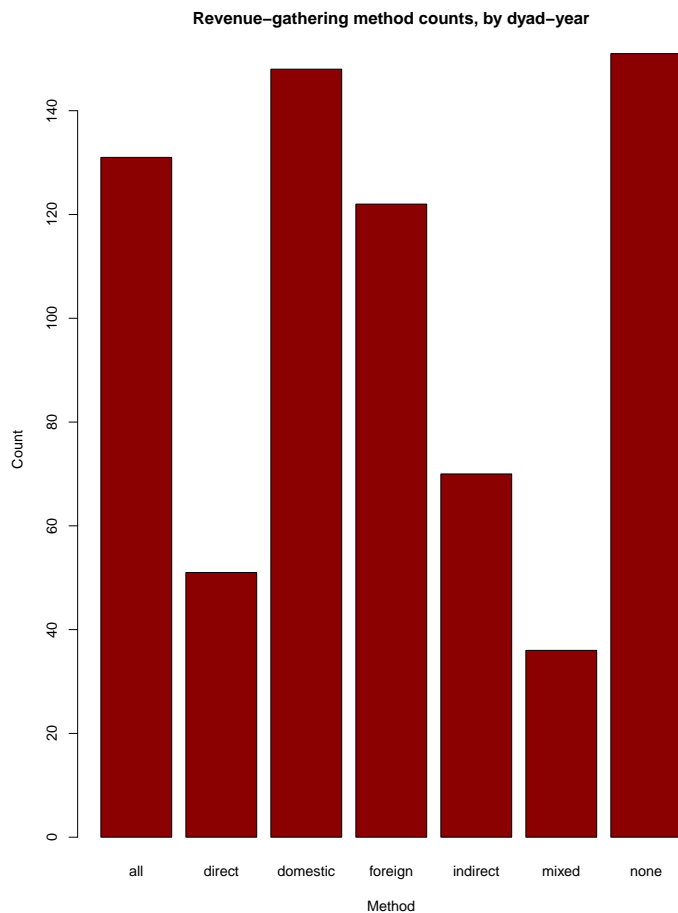
Figure 4: Revenue-gathering method counts, by dyad-year

Next, I estimate multinomial logit models of the following form (e.g., Fox and Hong 2009):

$$\Pr(Y_i = j) = \frac{\exp(\mathbf{x}_i' \beta_j)}{1 + \sum_{k=2}^{n} \exp(\mathbf{x}_k' \beta_j)} \qquad \text{for} \quad j = 2, 3, ..., n,$$

where the left-hand side is the probability that for observation i (i.e., a dyad-year), funding means j is chosen out of n alternatives. In what follows, "none" is the reference means of funding. As the coefficients of logit models are difficult to interpret intuitively, I provide the odds ratios below.

These results show partial support for the hypotheses laid out above. Relative to the reference category of no discernible source of income, across a variety of specifications, groups with higher ideological position scores are more likely to opt for foreign money (i.e., the odds ratio is greater than 1), in support of hypothesis 1. Correspondingly, they

Table 2: Multinomial logit estimation

	Odds ratios			
	(1)	(2)	(3)	(4)
(Intercept): all	0.864*** (0.120)	201.473*** (3.063)	218.725*** (2.471)	136.088*** (2.366)
(Intercept): direct	0.277 (0.186)	0.009 (3.591)	0.114 (3.144)	280.222*** (2.827)
(Intercept): domestic	0.969*** (0.116)	0.00000 (2.809)	0.00000 (2.787)	0.0001 (2.048)
(Intercept): foreign	0.790*** (0.123)	0.121 (7.522)	24.389*** (4.941)	900.663*** (3.218)
(Intercept): indirect	0.458** (0.146)	0.00002 (3.727)	0.00000 (3.600)	0.012 (2.215)
(Intercept): mixed	0.215 (0.201)	0.002 (4.971)	0.006 (3.785)	6.433 (3.482)
Log resource endowment: all		0.959*** (0.088)	1.004*** (0.078)	0.969*** (0.058)
Log resource endowment: direct		1.091*** (0.115)	1.168*** (0.103)	0.977*** (0.066)
Log resource endowment: domestic		1.410*** (0.112)	1.647*** (0.083)	1.100*** (0.061)
Log resource endowment: foreign		0.963** (0.364)	0.677*** (0.140)	0.901*** (0.077)
Log resource endowment: indirect		1.021*** (0.196)	1.267*** (0.098)	0.816*** (0.090)
Log resource endowment: mixed		1.643*** (0.236)	1.059*** (0.105)	0.940*** (0.085)
Log GDP per capita: all		1.224*** (0.293)		1.028*** (0.221)
Log GDP per capita: direct		1.744*** (0.340)		0.691* (0.273)
Log GDP per capita: domestic		1.764*** (0.317)		2.583*** (0.199)
Log GDP per capita: foreign		0.491 (0.803)		0.454 (0.325)
Log GDP per capita: indirect		1.986*** (0.521)		2.336*** (0.273)
Log GDP per capita: mixed		0.184 (0.785)		0.712* (0.350)
Isolation: all		0.0005 (1.724)	0.001 (1.527)	0.003 (1.319)
Isolation: direct		0.054 (1.929)	0.036 (1.911)	0.014 (1.587)
Isolation: domestic		70.288*** (1.794)	355.915*** (1.632)	2.521* (1.121)
Isolation: foreign		4,541.995*** (5.720)	189.415*** (3.869)	1.217 (1.932)
Isolation: indirect		554.965*** (2.856)	2,882.140*** (2.591)	24.489*** (1.445)
Isolation: mixed		133.251*** (3.663)	6.060* (2.685)	2.551 (2.121)
Peak size: all		1.000*** (0.0001)	1.000*** (0.0001)	
Peak size: direct		1.000*** (0.0001)	1.000*** (0.0001)	
Peak size: domestic		1.000*** (0.0001)	1.000*** (0.0001)	
Peak size: foreign		1.000*** (0.0001)	1.000*** (0.0001)	
Peak size: indirect		1.000*** (0.0001)	1.000*** (0.0001)	
Peak size: mixed		1.000*** (0.0001)	1.000*** (0.0001)	
Ideology: all	1.065*** (0.112)	0.705** (0.224)	0.726** (0.225)	0.735*** (0.159)
Ideology: direct	1.766*** (0.162)	0.812** (0.298)	0.889** (0.290)	1.246*** (0.193)
Ideology: domestic	0.835*** (0.108)	0.690** (0.224)	0.749*** (0.218)	0.599*** (0.158)
Ideology: foreign	1.187*** (0.115)	1.539*** (0.329)	1.815*** (0.306)	1.290*** (0.204)
Ideology: indirect	0.837*** (0.135)	0.908** (0.337)	0.945** (0.324)	1.350*** (0.206)
Ideology: mixed	0.631*** (0.177)	0.429 (0.399)	0.392 (0.429)	0.704** (0.237)
Observations	709	322	322	470
R^2	0.015	0.293	0.280	0.162
Log Likelihood	−1,285.977	−401.031	−408.572	−719.387
LR Test	37.868*** (df = 12)	332.863*** (df = 36)	317.782*** (df = 30)	279.120*** (df = 30)

Note: Standard errors in parentheses.   *p<0.05; **p<0.01; ***p<0.001

also appear less likely to opt for either purely domestic revenue, or a "mixed" approach. However, in terms of the *breakdown* of domestic revenue choices, the estimates for both direct and indirect extraction straddle the odds-ratio cutoff of 1 depending on the specification, suggesting no conclusive support for hypotheses 2 and 3.

In Table 3, I provide similar estimations, but with a recategorized dependent variable which yields similar results. Hausman-McFadden tests also fail to reject the IIA (independence of irrelevant alternatives) hypothesis. Here direct and indirect positives are recoded as domestic, and mixed as all.

Table 3: Multinomial logit estimation (alternative categories)

	Odds ratios			
	(1)	(2)	(3)	(4)
(Intercept): all	1.106*** (0.112)	86.920*** (2.738)	46.245*** (2.155)	127.446*** (2.021)
(Intercept): domestic	1.782*** (0.102)	0.00003 (2.414)	0.0001 (2.169)	0.026 (1.719)
(Intercept): foreign	0.790*** (0.123)	1.677 (6.828)	70.916*** (4.655)	489.155*** (3.066)
Log resource endowment: all		0.957*** (0.082)	1.017*** (0.070)	0.950*** (0.054)
Log resource endowment: domestic		1.228*** (0.086)	1.417*** (0.067)	1.014*** (0.053)
Log resource endowment: foreign		0.849* (0.330)	0.659*** (0.138)	0.905*** (0.075)
Log GDP per capita: all		1.162*** (0.255)		0.991*** (0.199)
Log GDP per capita: domestic		1.929*** (0.242)		1.831*** (0.177)
Log GDP per capita: foreign		0.645 (0.720)		0.485 (0.315)
Isolation: all		0.003 (1.557)	0.005 (1.325)	0.015 (1.161)
Isolation: domestic		14.797*** (1.415)	25.493*** (1.314)	1.633 (1.018)
Isolation: foreign		612.419*** (5.051)	111.356*** (3.552)	1.381 (1.847)
Peak size: all		1.000*** (0.0001)	1.000*** (0.0001)	
Peak size: domestic		1.000*** (0.0001)	1.000*** (0.00005)	
Peak size: foreign		1.000*** (0.0001)	1.000*** (0.0001)	
Ideology: all	0.953*** (0.103)	0.679** (0.213)	0.682** (0.218)	0.738*** (0.148)
Ideology: domestic	0.958*** (0.094)	0.747*** (0.207)	0.836*** (0.206)	0.858*** (0.140)
Ideology: foreign	1.180*** (0.113)	1.543*** (0.326)	1.807*** (0.307)	1.240*** (0.201)
Observations	709	322	322	470
R^2	0.003	0.281	0.266	0.118
Log Likelihood	−947.943	−289.931	−295.874	−506.190
LR Test	4.896 (df = 6)	226.867*** (df = 18)	214.980*** (df = 15)	135.520*** (df = 15)

Note: Standard errors in parentheses. *p<0.05; **p<0.01; ***p<0.001

Finally, to better illustrate inter-dependencies and non-linearities, I provide a visualization of the predicted probabilities for each funding source as a function of stated political positions. Note that because of the relative paucity of groups toward the right of the distribution, the uncertainty in that region is much higher.
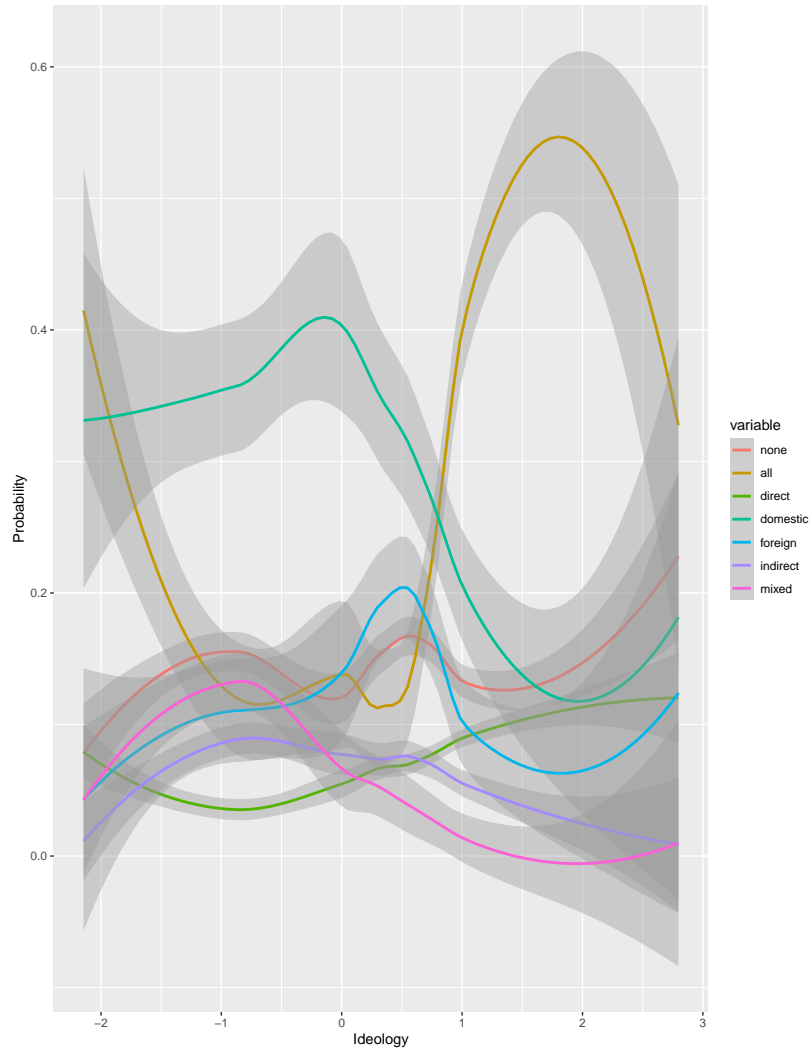
Figure 5: Predicted probabilities as a function of ideology (Loess smoothing, 95% confidence intervals in gray)

7 Illustrative example

To provide a concrete illustration of the dynamics discussed above, consider the case of the Free Aceh Movement (GAM), a group founded to militate for the independence of Aceh, the northern portion of the island of Sumatra, which is controlled by Indonesia. The evidence adduced above suggests a cross-organizational linkage between ideological expressions and funding behavior, particularly with regard to foreign sponsorship, but is insufficient to establish a causal direction. Accordingly, in this section I examine variation within GAM over time to shed some light on the mechanisms at play. There are four main takeaways from this case. First, the connection between ideological positioning and the relative viability of different funding sources is clear in the historical record in ways consistent with the empirical results discussed above. Second, this linkage is present in the thinking of group leadership, who attempt to tailor their communications to external conditions and intra-organizational dynamics. Third, the history of GAM suggests an ability on the part of group leaders to learn over time how better to craft messages that appeal to relevant audiences. As is often the case with other political actors, militants do not begin with perfect knowledge of what their constituents and patrons wish to hear; they iteratively adapt their rhetoric as they learn more about their environment. And finally, in keeping with the discussion above regarding the relative stability of organizational ideology over time, the calibrations that groups execute over time are confined within bounds. This is not to say that they are not meaningful, but variation within an organization usually pales in comparison to differences between even similarly-minded groups, and GAM is no exception.

The choice to focus on GAM is noteworthy for several reasons. For one thing, GAM is an organization considered by scholars to have undergone several discrete shifts in communication strategy, composition, and funding—most researchers identify three distinct phases of conflict with the Indonesian central government. This feature has the advantage of holding a number of considerations pertinent to funding behavior constant, such as natural resource endowments. Second, scholars have documented variation in both the ideological communications of the group and the provenance of its finances, enabling an examination of the temporal relations between the two. Finally, the group's various instantiations spanned decades, including both the Cold War and postwar periods, which saw changes in patterns of financing of militant groups by foreign patrons.

Scholars of Aceh trace the roots of the conflict to Achenese discontentment with

early post-colonial institutions, which were perceived as being overly centralized in Jakarta (e.g., Zunzer 2008). This center-periphery conflict took several forms. First, Aceh residents objected to the expropriation of local natural resources by the central government and foreign petroleum corporations, which were decried as "Javanese colonialism" in the context of Aceh's "distinct history as an independent kingdom from the 15th century until the beginning of the 20th century" (Niksch 2002). Second, whereas Schulze (2004) characterizes Java as "syncretistic," Acehnese were overwhelmingly Muslim (Ross 2005). Before the advent of GAM, a geographically broader group called Darul Islam had attempted in 1953 to impose an Islamic State on the country. As part of peace negotiations that ended the uprising, an Acehnese leader, Daud Beureueh, obtained regional autonomy and the ability to enforce Islamic law (Schulze 2004). However, after the rise of Indonesian President Suharto, this status was "effectively revoked" in the late 1960s (Niksch 2002; Ross 2005).

It was in this context that Hasan di Tiro established the first iteration of the Free Aceh Movement. Di Toro was a descendant of a local hero who had resisted Dutch colonization, and was also a supporter of Beureueh (Schulze 2004). What is noteworthy about the organization's early ideological expressions, however, is their complex relationship with Islam—as a rallying identity for potential supporters, a source of objections to central Indonesian rule, and an attempt to appeal to international audiences. In particular, there was a disjuncture between the communications aimed at international audiences and the policies administered locally. In a manifesto released in late 1976, which was, notably, addressed to "the peoples of the world," di Tiro made no references to Islam, instead explicitly framing the Acehnese independence movement as akin to the anti-colonial struggle against the Dutch and spotlighting the unique economic endowment and historical lineage of the Acehnese (Schulze 2004; Ross 2005). Ross (2005) argues that this decision was intimately related to "efforts to find a message that appealed to both the Achenese people, and to foreign governments that could fund the movement...he must have been acutely aware of the need to appeal to foreign funders..." Di Toro evidently felt that an emphasis on Islam would deter potential foreign sponsors (Ross 2005).

However, although this manifesto is not present in the results presented above (it is not the closest document to the time period for which funding data are available—see the appendix below for a discussion of inclusion criteria), when included its ideological score is even further "left" than the later GAM manifesto, itself one of the furthest left on the parochial-international dimension. That is to say, although formally addressed

to international observers, in its grievances and goals, it appears better tailored to appeal to a specific, domestic audience.

And indeed, Di Toro's notion that a secular, anti-colonial framing would attract foreign sponsors was mistaken. In the first manifestation of GAM, none were forthcoming, and not for lack of direct effort—di Tiro, for example, sought in vain to obtain sponsorship from the CIA (Ross 2005). On the other hand, the fact that the first manifesto had a parochial flavor does not imply that it was immediately to the liking of all Acehnese residents. In particular, di Tiro's decision not to privilege Islam in the organization's self-image alienated Daud Beureueh and his partisans, as well as other local Islamic leaders whose support was considered necessary to the construction of a broader movement (Ross 2005; Kell 2010; see also Sjamsuddin 1985).

In the short term, then, di Toro's efforts to thread the political needle failed: some Acehnese were not attracted to a secular, anti-colonial vision of independence, even one that emphasized their particular ethnic histories. But neither were foreign observers interested in backing a movement whose goals and struggle seemed too specifically focused on Indonesia: In general, the movement at this point was weak from lack of funding and personnel, and was rather easily subdued by the Indonesian military by 1981, though not completely stamped out (Ansori 2012); in subsequent instantiations, the group shifted its rhetoric—marginally—in an ultimately vain attempt to obtain alternative modes of funding.

The second instantiation of the organization emerged in the late 1980s. This version was marked by significantly higher local membership, as well as contributions in the form of military training by Libyan dictator Muammar Qaddafi (Ansori 2012; Paul et al. 2013; Ross 2005). There are two questions of interest in this period: how did the organization manage to obtain Libyan aid, and why was more international support not forthcoming given the group's clear interest in obtaining it?

Scholars of Aceh are relatively decided on the first question: GAM made an effort to privilege Islam in its communications more than in the 1970s. Sindre (2018) argues "[t]he emphasis on Islam further strengthened the transnational links of the movement [sic] they received training and financial support from Gadhafi's Libya network in the 1980s." The change, however, appears indeed to have been one of emphasis rather than substance. As Kell (2010) puts it, "[w]hen the movement re-emerged with greater potency in the late 1980s, the intention of creating an Islamic state was more explicit, but concern over 'naked' colonialism...was still uppermost." This rather equivocal endorsement of political Islam appears to have engendered a similarly tepid response by Libya.

As mentioned, Sindre (2018) refer to "financial support," but Ross (2005) contends that Libya "did not offer GAM any additional funds or weaponry" beyond the training of members who traveled to Libya. At this point, although hard to establish definitively, the organization appears to have relied heavily for funding on Acehnese expatriates in Malaysia (Kell 2010).

Moreover, despite the entreaties of GAM leadership—who were living in exile in Sweden at this point—no other potential sponsors appeared interested in funding the Acehnese independence movement. There are multiple possible explanations for the tepid international response to GAM's solicitations. For one thing, unlike other conflicts of the day, it did not fit neatly into the ideologically binary Cold War narrative. A more parsimonious account, however, is that GAM's pronouncements did not change sufficiently to attract sponsors who were uninterested in narrow ethnic appeals. In addition to the quotations cited above, Sindre (2018) describes GAM's program as "anchored in ethno-nationalist demands." The text analysis also suggests that GAM did not attempt a wholesale reimagining of its platform, and perhaps for good reason—observers would have been wise to doubt the sincerity of ideological about-faces, making groups less likely to attempt them in the first place.

But although this incarnation of the organization was, by all accounts, more capable than the previous one, the Indonesian government responded forcefully, designating Aceh a "military operations area" and managing to suppress the insurgency by 1996 (Ansori 2012).

After the collapse of the regime of President Suharto, the remnants of the organization regrouped and experienced a "second revival" in 1999 (Ansori 2012). Schulze (2004) argues that "[t]he key to understanding GAM in the post-Suharto era...can be found in the exiled leadership's strategy of internationalization" (see also Aguswandi and Large 2008). In this context, internationalization denotes two related strategic adjustments that the group made. First, the group tried to appeal to Western governments in a bid for Western mediation. As di Tiro put it, "We don't expect to get anything from Indonesia. But we hope to get something from the U.S. and UN. I depend on the UN and the U.S. and EU..." (Schulze 2004). Second, GAM leaders infused their rhetoric about Acehnese independence with themes of democracy and human rights, abandoning the idea of restoring the sultanate, which had previously been the goal at least implicitly (Schulze 2004; Zunzer 2008). This shift was reflected somewhat in an August 1999 manifesto, which detailed human rights violations by the Indonesian military and called for the intervention of the UN, as well as in other communications

(Niksch 2002).

However, both a casual read and the text analysis suggest that these emphases were insufficient to orient the organization more internationally. The manifesto still fore-grounded Achenese history and anti-colonialism as the justifications for armed struggle. In terms of the consequences, there is no evidence that the new messaging paid any international dividends; the United Nations did not consider recognizing an independent Aceh, or intervening militarily, nor did GAM ever seriously contend for support from individual Western governments (Schulze 2004; Paul et al. 2013).

On the other hand, the more capable version of GAM did succeed in establishing a sophisticated domestic set of revenue streams. The organization developed a wide-ranging local direct taxation apparatus, which collected funds from individuals and businesses in both a bureaucratized manner and through extortion (Niksch 2002; Ross 2005; Large 2008). Interestingly, in 2000, GAM changed the name of its state tax to reflect that it was no longer striving to implement an Islamic legal state (Schulze 2004). The group arguably constituted in its last manifestation a budding proto-state, pro-viding "local government through their shadow civil service structure" (Schulze 2004). Before its disarmament in the mid-2000s, the organization reputedly enjoyed "substan-tial public support" (Niksch 2002). And although debated, there is some evidence that GAM has been involved in indirect extraction schemes as well, including drug smuggling, though the organization denies it (Schulze 2004).

Ultimately, however, due to defeats against the Indonesian military as well as the December 2004 tsunami, GAM declared a ceasefire, and the central government agreed to greater autonomy and resource allocation for the Aceh region (Paul et al. 2013). What can be learned generally from the case of GAM? Schulze (2004) provides a useful summation of the evolution of GAM's expressed ideology over time:

> While the overall aim of GAM is an independent Acehnese state and GAM's ideology is above all one of national liberation, it comprises a number of ideological subcurrents and characteristics. Some of these have remained constant since 1976; some have changed or, arguably, have moderated; some are new additions. The most important themes in the first category are Acehnese ethnic nationalism and Islam; in the second, anticapitalism and anti-Westernism; in the third, human rights and democracy (Schulze 2003: 247).

The foregoing has established a connection between these shifts and GAM's vary-

ing degrees of success at obtaining different types of funding. In general, however, the throughline of the group's communications remained ethnic nationalism. Around the edges, the organization attempted to highlight Islam and human rights to varying degrees, but these subthemes were consistently subordinated to the narrative of ethnic Acehnese independence. And in keeping with anecdotal evaluations of GAM communications over time, text analysis confirms their relative consistency. By the same token, the group's funding streams also varied to a small extent, but were predominantly domestic in their provenance. GAM's efforts at obtaining sustained international sponsorship were almost uniformly unsuccessful; potential patrons appeared unaffected by the group's superficial attempts to emphasize positions other than Acehnese nationalism.

The case of GAM suggests several promising avenues for future research. First, to what extent can organizations succeed at tailoring different messages to different audiences? The experience of GAM suggests that this is not a trivial obstacle; the group attempted in vain to privilege Islam at the local level and with Libya, and more secular, ethnic autonomy to other international observers. Second, how do communications evolve over time as groups familiarize themselves with their political environments, and what are the consequences? In other domains, such as the use of violence, scholars have documented learning on the part of militant leadership. For example, Osama bin Laden, later in life, attempted to curtail attacks against civilians by Al-Qaeda members, which were perceived as poisoning opinions of the organization (Abrahms and Potter 2015).

8   Discussion

In this paper, I provide evidence that formal communications by rebel groups can be informative signals, not necessarily of members' true preferences, but of how they intend to weather the pressures of civil wars, which force them to choose which constituencies to appeal to, typically under constraints. The findings provide partial support for the hypotheses advanced: groups whose manifestos reflect a more international orientation do indeed tend to rely more on foreign sponsorship. The proposed relationships between ideological expression and the particularities of domestic funding sources are not borne out by the data. Importantly, the juxtaposition of the text analysis estimates with a classification based on qualitative criteria suggests that political orientations along the

domestic-international axis are detectable via informal examination. Future research can extend this program in a number of directions.

The present project took ideological statements as somewhat inflexible statements of political priorities. I believe this assumption was justified for reasons previously discussed, but in the future, more fine-grained changes in organizations' statements could be considered as part of a larger project linking communication with behavior, as has been the norm in studies of American political actors. For example, while this study focuses on manifestos, future research can bring in more in-the-moment reactions to political events like violent attacks to assess how militant groups respond to feedback and how these reactions are reflected in future behavior. Another possibility is to bring in the outlay side of the ledger: how well do rebels' modes of communication predict how they spend the money available to them?

As data quality on militant revenue-gathering continues to improve, a more nuanced analysis of funding decisions is also possible. The outcomes I consider, by virtue of the data available, are binary, but this is an abstraction. For one thing, organizations plausibly attempt to pit sponsors against each other; for another, the value of a particular mode of revenue depends on its magnitude. While violent organizations should not be trusted to report accurate data, the reliability of objective statistics is improving in many areas in which militant groups operate, making it easier to assess the lucrativeness of a given strategy. And even with existing data, the variables can be further disaggregated to shed light on different dynamics—how, for example, does the ideology expressed by rebel outfits affect the *type* of sponsorship they receive? Another promising venue involves examining linkages between militant groups, which often collaborate on both attacks and enrichment schemes like drug smuggling. For example, LaVerle et al. (2002) provide suggestive evidence of collaboration between the Colombian FARC and foreign Islamist organizations on drug smuggling in the Triborder area of South America.

Rebel groups, by virtue of having perpetrated brutal acts, are often dismissed by observers as untrustworthy. Of course, the claims and justifications advanced in documents released by violent organizations are often bombastic and should not be taken at face value, but they do convey information—they are intended to be read, and most groups only release one or two manifestos throughout their lifetimes. I argue that such missives should be understood as attempts by groups to orient themselves with respect to a constellation of interested actors—for some, against others. Future research on this subject can delve into what other aspects of militant organizational behavior can

be better understood in the light of such communications.

9   References

Abrahms, Max, and Philip BK Potter. "Explaining terrorism: Leadership deficits and militant group tactics." International Organization 69, no. 2 (2015): 311-342.

Aguswandi, and Judith Large (eds.). "Reconfiguring politics: the Indonesia-Aceh peace process." Conciliation Resources 20 (2008).

Akcinaroglu, Seden, and Elizabeth Radziszewski. "Expectations, rivalries, and civil war duration." International Interactions 31, no. 4 (2005): 349-374.

Ansori, Mohammad. "From insurgency to bureaucracy: Free Aceh movement, Aceh party and the new face of conflict." Stability: International Journal of Security and Development 1, no. 1 (2012).

Beardsley, Kyle, and Brian McQuinn. "Rebel groups as predatory organizations: The political effects of the 2004 tsunami in Indonesia and Sri Lanka." Journal of Conflict Resolution 53, no. 4 (2009): 624-645.

Brown, Molly E., Kirk C. Silver, and Krishnan Rajagopalan. "A city and national metric measuring isolation from the global market for food security assessment." Applied Geography 38 (2013): 119-128.

Budge, Ian, Hearl Derek, David Robertson, and Derek Hearl, eds. *Ideology, strategy and party change: spatial analyses of post-war election programmes in 19 democracies.* Cambridge University Press, 1987.

Budge, Ian, and Michael J. Laver, eds. *Party policy and government coalitions.* Springer, 2016.

Buhaug, Halvard, Scott Gates, and Paivi Lujala. "Geography, rebel capability, and the duration of civil conflict." Journal of Conflict Resolution 53, no. 4 (2009): 544-569.

Byman, Daniel, Peter Chalk, Bruce Hoffman, William Rosenau, and David Brannan. "Trends in outside support for insurgent movements." Rand Corporation, 2001.

Collier, Paul. "On the economic consequences of civil war." Oxford economic papers 51, no. 1 (1999): 168-183.

Collier, Paul, and Anke Hoeffler. "Resource rents, governance, and conflict."

Journal of conflict resolution 49, no. 4 (2005): 625-633.

Conrad, Justin M., Kevin T. Greene, James Igoe Walsh, and Beth Elise Whitaker. "Rebel Natural Resource Exploitation and Conflict Duration." Journal of Conflict Resolution 63, no. 3 (2019): 591-616.

Davis, David R., and Will H. Moore. "Ethnicity matters: Transnational ethnic alliances and foreign policy behavior." International Studies Quarterly 41, no. 1 (1997): 171-184.

DeNardo, James. *Power in numbers: The political strategy of protest and rebellion.* Vol. 41. Princeton University Press, 2014.

Denny, Matthew J., and Arthur Spirling. "Text preprocessing for unsupervised learning: why it matters, when it misleads, and what to do about it." Political Analysis 26, no. 2 (2018): 168-189.

Early, Bryan R. "'Larger than a party, yet smaller than a state': locating Hezbollah's place within Lebanon?s state and society." World Affairs 168, no. 3 (2006): 115-128.

Fearon, James D., and David D. Laitin. "Ethnicity, insurgency, and civil war." American political science review 97, no. 1 (2003): 75-90.

"Fidel Castro in Farc hostage plea." *BBC News*, July 6, 2008.

Fortna, Virginia Page, Nicholas J. Lotito, and Michael A. Rubin. "Don't bite the hand that feeds: rebel funding sources and the use of terrorism in civil wars." International Studies Quarterly 62, no. 4 (2018): 782-794.

Fox, John, and Jangman Hong. "Effect displays in R for multinomial and proportional-odds logit models: Extensions to the effects package." Journal of Statistical Software 32, no. 1 (2009): 1-24.

Freeman, Michael. "The sources of terrorist financing: Theory and typology." Studies in Conflict Terrorism 34, no. 6 (2011): 461-475.

Hamilton, Kirk. *Where is the wealth of nations?: Measuring capital for the 21st century.* World Bank Publications, 2006.

Hengeveld, W. A. B. "World Distance Tables: 1948-1974." Inter-University Consortium for Political and Social Research, Ann Arbor, Michigan. (1996).

Högbladh, Stina, Therése Pettersson Lotta Themnér. "External Support in Armed Conflict 1975–2009. Presenting new data" Paper presented at the 52nd Annual International Studies Association Convention, Montreal, Canada. (2011).

Hou, Dongfang, Khusrav Gaibulloev, and Todd Sandler. "Introducing Extended Data on Terrorist Groups (EDTG), 1970 to 2016." Journal of Conflict Resolution (2019): 0022002719857145.

Imbens, Guido. "What's New in Econometrics." NBER Presentation, 2007.

Katzman, Kenneth. "Iran: The People's Mojahedin Organization of Iran." In Benliot, Albert V (ed.). *Iran: Outlaw, Outcast Or Normal Country?*. Nova Publishers, 2001.

Kell, Tim. *The roots of Acehnese rebellion, 1989-1992*. Equinox Publishing, 2010.

Large, Judith. "The challenge of hidden economies and predation for profit." Reconfiguring Politics: The Indonesia-Aceh Peace Process (2008).

Laver, Michael, Kenneth Benoit, and John Garry. "Extracting policy positions from political texts using words as data." American political science review 97, no. 2 (2003): 311-331.

Berry, LaVerle, Glenn E. Curtis, Rex A. Hudson, and Nina A. Kollars. "A global overview of narcotics-funded terrorist and other extremist groups." LIBRARY OF CONGRESS WASHINGTON DC FEDERAL RESEARCH DIV, 2002.

Levi, Margaret. Of rule and revenue. Univ of California Press, 1989.

"Logit models relaxing the iid hypothesis." Available at `https://cran.r-project.org/web/packages/mlogit/vignettes/c4.relaxiid.html`.

Mayshar, Joram, Omer Moav, and Zvika Neeman. "Geography, transparency, and institutions." American Political Science Review 111, no. 3 (2017): 622-636.

McFadden, Daniel. "Modeling the choice of residential location." Transportation Research Record 673 (1978).

Niksch, Larry. "Indonesian separatist movement in Aceh." DEFENSE ACQUISITION UNIV FORT BELVOIR VA DAVID D ACKER LIBRARY AND KNOWLEDGE REPOSITORY, 2002.

Nome, Martin Austvoll. "Transnational ethnic ties and military intervention: Taking sides in civil conflicts in Europe, Asia and North Africa, 1944–99." European Journal of International Relations 19, no. 4 (2013): 747-771.

Olson, Mancur. "Dictatorship, democracy, and development." American political science review 87, no. 3 (1993): 567-576.

Otis, John. "The FARC and Colombia's illegal drug trade." Wilson Center (2014): 1-26.

Paul, Christopher, Colin P. Clarke, Beth Grill, and Molly Dunigan. *Paths to victory: detailed insurgency case studies*. Rand National Defense Research Inst Santa Monica CA, 2013.

Peceny, Mark, and Michael Durnan. "The FARC's best friend: US antidrug policies and the deepening of Colombia's civil war in the 1990s." Latin American politics and society 48, no. 2 (2006): 95-116.

Popovic, Milos. "Fragile proxies: Explaining rebel defection against their state sponsors." Terrorism and Political Violence 29, no. 5 (2017): 922-942.

Proksch, Sven-Oliver, and Jonathan B. Slapin. WORDFISH: Scaling Software for Estimating Political Positions from Texts. Version 1.3. 15 January 2009. http://www.wordfish.org.

Proksch, Sven-Oliver, and Jonathan B. Slapin. "How to avoid pitfalls in statistical analysis of political texts: The case of Germany." German Politics 18, no. 3 (2009): 323-344.

Proksch, Sven-Oliver, and Jonathan B. Slapin. "Position taking in European Parliament speeches." British Journal of Political Science 40, no. 3 (2010): 587-611.

Proksch, Sven-Oliver, Will Lowe, Jens Wäckerle, and Stuart Soroka. "Multilingual sentiment analysis: A new approach to measuring conflict in legislative speeches." Legislative Studies Quarterly 44, no. 1 (2019): 97-131.

Pura, Raphael. "Free Aceh Movement Keeps Up Fight for Province's Independence." Wall Street Journal. May 27, 1999.

Revkin, Mara. "The Non-Economic Logic of Rebel Taxation: Evidence from an Islamic State-Controlled District." Local Politics and Islamist Movements (2017): 65.

Revkin, Mara. "What Explains Taxation by Resource-Rich Rebels? New Data from the Islamic State in Syria." (2017).

Rochlin, James Francis. *Vanguard Revolutionaries in Latin America: Peru, Colombia, Mexico.* Lynne Rienner Publishers, 2003.

Ross, Michael. "A closer look at oil, diamonds, and civil war." Annu. Rev. Polit. Sci. 9 (2006): 265-300.

Ross, Michael L. *Resources and rebellion in Aceh, Indonesia.* Washington, DC: World Bank, 2005.

Ross, Michael L. "What do we know about natural resources and civil war?." Journal of peace research 41, no. 3 (2004): 337-356.

Saideman, Stephen M. "Discrimination in international relations: Analyzing external support for ethnic groups." Journal of Peace Research 39, no. 1 (2002): 27-50.

Salehyan, Idean. "The delegation of war to rebel organizations." Journal of Conflict Resolution 54, no. 3 (2010): 493-515.

Salehyan, Idean, Kristian Skrede Gleditsch, and David E. Cunningham. "Explaining external support for insurgent groups." International Organization 65, no. 4 (2011): 709-744.

Salehyan, Idean, David Siroky, and Reed M. Wood. "External rebel sponsorship and civilian abuse: A principal-agent analysis of wartime atrocities." International Organization 68, no. 3 (2014): 633-661.

Sanchez de la Sierra, Raul. "On the origin of the state: Stationary bandits and taxation in Eastern Congo." Available at SSRN 2358701 (2017).

Schulze, Kirsten E. "The struggle for an independent Aceh: The ideology, capacity, and strategy of GAM." Studies in Conflict and Terrorism 26, no. 4 (2003): 241-271.

Schulze, Kirsten E. "The free aceh movement (GAM): Anatomy of a separatist organization." East-West Center. (2004).

Scott, James C. *The moral economy of the peasant: Rebellion and subsistence in Southeast Asia.* Yale University Press, 1977.

Shapiro, Matthew A., Libby Hemphill, and Jahna Otterbacher. "Doing what

I say: connecting congressional social media behavior and congressional voting." In Proceedings of the Annual Meeting of the Midwest Political Science Association, pp. 1-32. Chicago: Midwest Political Science Association, 2012.

Sindre, Gyda M. "From secessionism to regionalism: Intra-organizational change and ideological moderation within armed secessionist movements." Political Geography 64 (2018): 23-32.

Sjamsuddin, Nazaruddin. *The republican revolt: A study of the Acehnese rebellion.* Institute of Southeast Asian Studies, 1985.

Slapin, Jonathan B., and Sven-Oliver Proksch. "A Scaling Model for Estimating Time-Series Party Positions from Texts." American Journal of Political Science 52, no. 3 (2008): 705-772.

von Uexkull, Nina, and Therese Pettersson. "Issues and actors in African non-state conflicts: A new data set." International Interactions 44, no. 5 (2018): 953-968.

Walsh, James Igoe, Justin M. Conrad, Beth Elise Whitaker, and Katelin M. Hudak. "Funding rebellion: The Rebel Contraband Dataset." Journal of Peace Research 55, no. 5 (2018): 699-707.

Weinstein, Jeremy M. *Inside rebellion: The politics of insurgent violence.* Cambridge University Press, 2006.

Windsor, Leah Cathryn, James Grayson Cupit, and Alistair James Windsor. "Automated content analysis across six languages." PloS one 14, no. 11 (2019).

World Bank. "World development indicators: GDP per capita." (2019). Data obtained from `https://data.worldbank.org/indicator/NY.GDP.PCAP.KD`.

Zunzer, Wolfram. "From Politics to Arms to Politics Again: The Transition of the Gerakan Acheh Merdeka (Free Aceh Movement-GAM)." (2008).

10   Appendix 1: Changes to existing datasets

I made the following changes to the Walsh et al. (2018) and UCDP (Hogbladh et al. 2011) datasets:

1. Removed interstate conflicts

2. Removed sponsorship of states within intrastate conflicts

3. Removed sponsorship data before 1990 (for temporal overlap)

4. Removed contraband data after 2009 (for the same reason)

5. Removed non-cohesive groups such those with no organizational moniker (e.g., "Chechens") or discernible ideology.

6. Removed groups that act as umbrella organizations for multiple distinct subgroups, or those that consist of tactical alliances between ideologically disparate bodies (the subgroups are still eligible for inclusion).

As mentioned, I used the World Bank (2006; 2019) data on both resource endowments (subsoil wealth) and GDP per capita. For countries with missing GDP values (Djibouti, Liberia, Somalia, Afghanistan), I used the regional average. For countries missing 1995 resource endowment estimates, I used the next temporally closest value (2005 for Chad, Nepal, Sierra Leone; 2010 for Uganda and Sri Lanka).

11 Appendix 2: Manifesto collection process

Militant groups disseminate a variety of communications besides manifestos, including codes of conduct for members, statements in reaction to local or international developments, hostage demands, communiques on a particular policy question, and "constitutions" outlining procedural and legal workings for an aspirational state, to name a few.

My aim is to draw on the most general articulation available of a group's philosophy, aims, grievances, and strategy, in the period closest to the data I have available as possible, the better to provide a basis for comparison. As such, I focus on programs or manifestos, which are explicit declarations of the driving forces behind an organization. Other statements, of course, are revealing, but are often reactive to current events or concern procedural matters whose importance is internal to the organization. If nothing else, such communications are more subject to change. For a militant group, a manifesto is *meant* to be stickier. To take an example that will be familiar to American readers, consider the contrast between the Constitution and the Declaration of Independence. Each is illustrative of its writers' thinking and of the moment of its writing, and both implicate questions of policy, but the Declaration is a more philosophical document that covers the history of the relevant conflict, what the relevant grievances are, and what is to be done about them. In contrast, the Constitution is preoccupied much more with technical institutional and legal questions. Moreover, it has been amended repeatedly over time.

Having detailed the reasons underlying a focus on manifestos, I proceed to a summary of the collection process. I scrape manifestos from a variety of sources (mainly online) based on the intersection of the sets of groups in the RCD and UCDP datasets. Some organizations have their own website (e.g., PJAK: `pjak.eu/en`) ; others came from Facebook posts, previous academic research, blogs or news articles. Most groups release one manifesto; for those that released more than one, I opted for the one that appeared in the time period closest to the time for which I have funding data. In a few cases I relied on manifestos that were released outside the period under analysis. However, we would not expect groups' preferences to change very much in most cases. I did not consider documents that were considered "inspirational" texts for organizations but were written by non-members—for example, the book "Management of Savagery" is sometimes considered to have guided Al-Qaeda members' conduct and partially inspired ISIS, but it was written by an outsider. If a group later transitioned into a peaceful political party, I did not include texts released after this transition; however, I did include manifestos from parties affiliated with violent organizations while the conflict was ongoing (e.g., Sinn Fein before the end of the "Troubles.")

As part of the data cleaning process, I use Google machine translation to convert texts to English; corrected obvious typos; changed British spellings to American; and removed numbers, punctuation, and "stop words" that do not convey substance.

Most manifestos were taken from open sources. In certain cases, however, I drew from previous scholarship on a particular organization. Here I endeavor to provide

proper attribution, but it is possible that I missed some relevant research because manifestos often appear in multiple outlets.

1. The text and translation of the GIA manifesto was obtained from work by Aymenn Jawad Al-Tamimi, available at `http://www.aymennjawad.org/21675/the-armed-islamic-group`

2. The EPLF manifesto was taken from Weldehaimanot and Taylor (2011).

3. The LRA manifesto was taken from Finnstrom (2011).

4. Numerous manifestos were taken from Geneva Call's "Their Words" repository available at `http://theirwords.org/pages/home`.

5. Numerous manifestos were taken from El Centro de Documentación de los Movimientos Armados's website available at `cedema.org`.

6. Devrimci Sol's manifesto was taken from Kenville (2000).

7. The MEK's manifesto was taken from a website that appears to be supportive of the organization, but according to the website `https://mek-iran.com`, "[m]uch of the information for this website is derived from 'Enemies of the Ayatollahs,' by Mohammad Mohaddessin, Zed Books, London, 2004."

11.1   References

Finnstrom, Sverker. "An African hell of colonial imagination?: The Lord's Resistance Army in Uganda, another story." (2010): 74-89.

Kenville, Michael J. *Devrimci sol: a study of Turkey's revolutionary left and its impact on United States interests, 1968-1999.* NAVAL POSTGRADUATE SCHOOL MONTEREY CA, 2000.

Mohaddessin, Mohammad. *Enemies of the Ayatollahs: the Iranian opposition and its war on Islamic fundamentalism.* Zed Books, 2004.

"Their Words: Directory of Armed Non-State Actor Humanitarian Commitments." Geneva Call. (2018).

Weldehaimanot, Simon, and Emily Taylor. "Our struggle and its goals: a controversial Eritrean manifesto." Review of African Political Economy 38, no. 130 (2011): 565-585.

12 Appendix 3: Additional text analysis

Here I provide additional text-based evidence in support of the international-parochial dimension I argue for above. First, the following is a topic model using the `stm` package in R (Roberts et al. 2019). To identify the 10 most relevant topics, I restrict terms to those that appear at least 10 times in the corpus, and in between 5 and 20 manifestos. (The results are broadly robust to choosing different numbers of topics.)
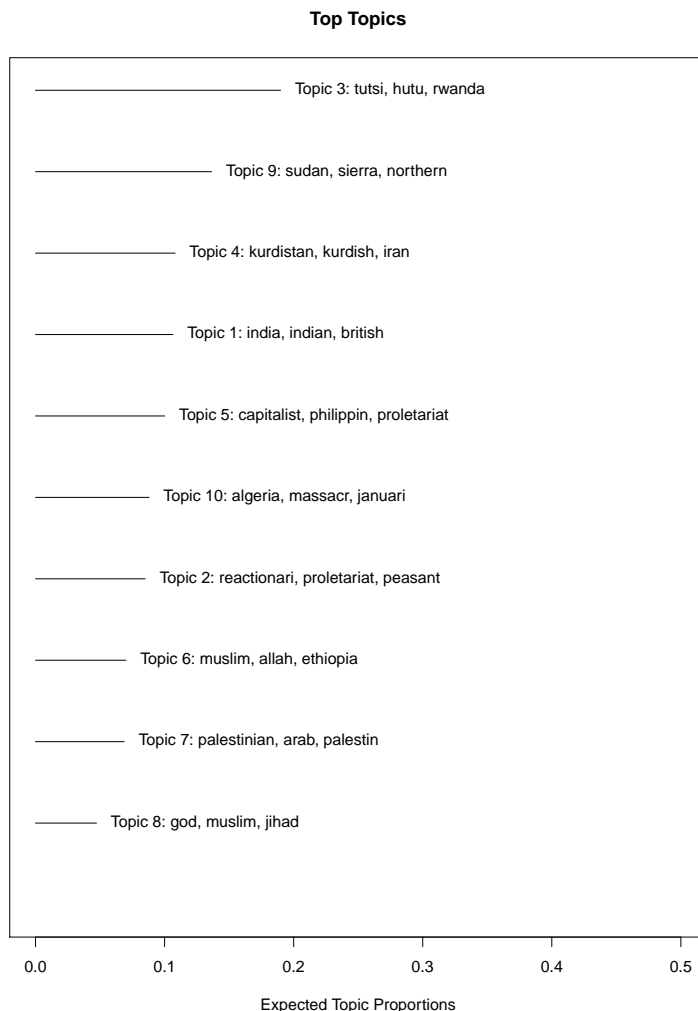
Top Topics

Figure 6: Topic model

Next, I replicate the Wordfish scaling while excluding the four most extreme organizations—two on each end of the spectrum. The results for this subset are similar to the overall sample:
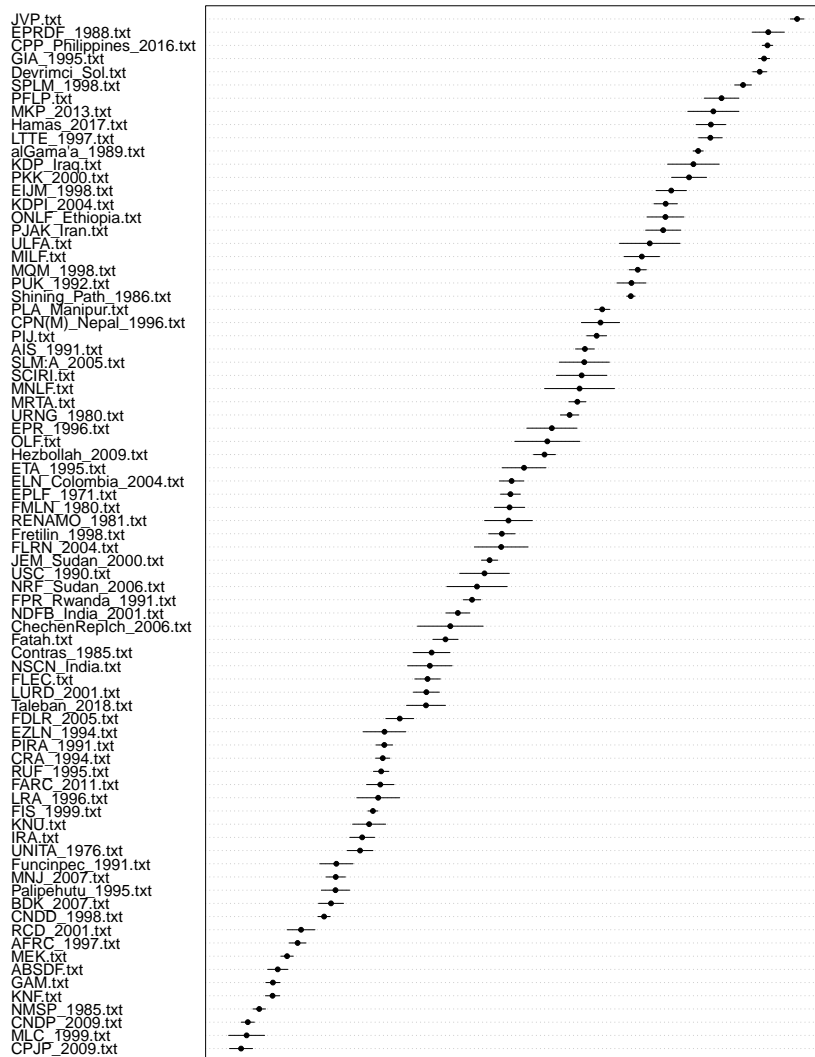
Figure 7: Text analysis (replication on subsample)

12.1 References

Roberts, Margaret E., Brandon M. Stewart, and Dustin Tingley. "Stm: An R package for structural topic models." Journal of Statistical Software 91, no. 1 (2019): 1-40.