# CREDIT CLAIMS AND THE SURVIVAL OF TERRORIST ORGANIZATIONS

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#### **Abstract**

This study investigates the relationship between terrorist credit claims and government counterterrorism efforts, focusing on the impact of claims on group survival. Using data from the Extended Data on Terrorist Groups (EDTG) and Global Terrorism Database (GTD), we find that groups issuing credit claims have shorter lifespans than groups that remain silent. We are unable, however, to connect this increased mortality to government counterterrorism efforts even though government action is supposed to deter groups from issuing credit claims. Instead, we find that credit claiming groups are more likely to merge with other terrorist organizations, splinter apart, or fade away through inactivity. These findings raise questions about how the prospect of government counterterrorism efforts influences terrorist activity. The idea that the threat of government retaliation dissuades groups from issuing credit claims may require a reassessment.

Keywords: terrorism, credit claims, publicity, survival

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## INTRODUCTION

Does the specter of counterterrorism deter terrorist organizations from announcing responsibility for acts of terrorism? There is a good reason to say "yes." Since credit claims reveal "whodunnit," governments can use these revelatory announcements to identify and punish the perpetrators of terrorism<sup>1</sup>. This is why anonymity is thought to be a survival strategy for terrorists<sup>2</sup>.

Nevertheless, several systematic studies have failed to demonstrate a connection between credit-claiming and counterterrorism. Credit-claims covary with competition between terrorist groups<sup>3</sup>, whether attacks target civilians<sup>4</sup>, and the use of suicide attacks<sup>5</sup>. Efforts to show a relationship between credit claiming and counterterrorism have been unsuccessful<sup>6</sup>.

This paper reports on our attempt to connect credit taking and counterterrorism, but instead of trying to establish that counterterrorism influences the credit claiming rate, we examine whether the lifespans of credit claiming groups are more likely to be cut short by government counterterrorism efforts. Using the Extended Data on Terrorist Groups (EDTG)<sup>7</sup>, we first examine whether credit claiming terrorist organizations expose themselves to greater risk, measured by survival rates, than other terrorist organizations. Next, finding that credit claiming groups tend to have shorter lifespans than non-credit claiming groups, we examine whether this increased mortality rate can be attributed to actions by state police and military forces.

We were unable, however, to answer this second question affirmatively. We found that credit claiming groups are more likely than silent attackers to disband by splintering apart, abandoning terrorism after entering political and diplomatic processes, merging with other organizations, and fading away through inactivity. We could not show that government counterterrorism efforts jeopardized the survival of credit claiming groups more than others.

These patterns raise further questions about the relationship between credit-claiming and counterterrorism. Established theory may overstate the amount of information that credit claims reveal, which might explain why establishing a link between credit claiming rates and counterterrorism

<sup>&</sup>lt;sup>1</sup>(Hoffman 1997)

<sup>2</sup>(Shapiro 2013)

<sup>3</sup>(Hoffman 2010; Kearns 2021)

<sup>4</sup>(Abrahms and Conrad 2017)

<sup>5</sup>(Pape 2003)

<sup>6</sup>(Hoffman 2010; Abrahms and Conrad 2017)

<sup>7</sup>(Hou, Gaibulloev and Sandler 2020)

efforts has been difficult. Rather than exposing groups to more repression, the increased propensity of groups that issue credit claims to fade away suggests that these announcements may help identify the perpetrators that, to paraphrase McCormick (1993), want to look good, rather than be good.

## CREDIT CLAIMS ARE COMMUNICATIONS

Credit claiming has not always been a common practice among terrorists. Nineteenth century terrorists aspired to communicate with audiences using dramatic violence alone<sup>8</sup>, but this proved to be a difficult standard to maintain. For every easily understood anonymous attack, there are others that are hard to either classify or interpret without information about who attacked and why.

Credit claims help demystify acts of terrorism. The announcements perpetrators make revealing their responsibility for acts of violence enable terrorists to explain their motives, and communicate demands<sup>9</sup>. Groups also use credit claims to reward and control the behavior of disparate operatives<sup>10</sup>, to compete with rivals for the allegiances of supportive audiences<sup>11</sup> and show resolve<sup>12</sup>. Despite these useful functions, credit claims are the exception rather than the rule. Less than twenty percent of attacks are followed by claims of responsibility<sup>13</sup>. The question is, why?

## THE SPECTER OF COUNTERTERRORISM

One answer is that terrorists can use nonverbal signals (e.g., trademark attacks) to reveal their involvement in violence<sup>14</sup>. Another is that terrorists avoid taking credit for attacks against civilians because these attacks hurt their reputations<sup>15</sup>. A third answer suggests that groups are more likely to issue credit claims only when they must distinguish themselves from rivals<sup>16</sup>.

The first published hypothesis about the rarity of credit claims, however, focused on the ability

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<sup>8</sup>(Bolt 2012)

<sup>9</sup>(Hansen 2021)

<sup>10</sup>(Brown 2017, 2021)

<sup>11</sup>(Phillips and Ríos 2020)

<sup>12</sup>(Onder 2023)

<sup>13</sup>(Kearns 2021)

<sup>14</sup>(Hansen 2021)

<sup>15</sup>(Abrahms, Beauchamp and Mroszczyk 2017)

<sup>16</sup>(Hoffman 2010; Hansen 2022)
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of governments to use the threat of reprisals to deter groups from issuing credit claims<sup>17</sup>. Since counterterrorism efforts can imperil the survival of terrorist organizations, groups must be careful about revealing their involvement in violence..

The empirical case for this deterrence argument is weak, however. Neither Hoffman (2010) nor Abrahms and Conrad (2017) found evidence suggesting that counterterrorism influenced credit-claiming in their respective analyses of transnational and domestic terrorism events. Interviews conducted by Brown (2017) also provide little reason to believe that perpetrators worry that their credit claims might result in damaging responses by governments.

These non-findings might indicate that, in general, the safety of terrorist organizations are not compromised by credit claims. Credit claims usually offer just a perpetrating group's name and, sometimes, a demand or a threat. This information is often insufficient for authorities to act upon<sup>18</sup>. Complicating matters, many credit claims are deceptive<sup>19</sup>), making it difficult to rely on these announcements for counterterrorism purposes.

Then there is the question of how aggressively governments respond to credit claiming groups. Governments may not exert as much pressure to credit claiming groups as they do to groups that maintain a lower profile. Groups that issue credit claims are often weak in some way—newly formed, relatively unknown, or recovering from leadership losses<sup>20</sup>. Counterterrorism efforts may be calibrated to match the perceived severity of the threat terrorist organizations present.

In the case of Peru, for example, the Peruvian government used its most aggressive counterterrorism measures against the Shining Path<sup>21</sup>, even though the Tupac Amaru Revolutionary Movement (MRTA) was a more active credit claimer<sup>22</sup>. The differential strengths of the two groups helps explain the different responses. The MRTA was disadvantaged relative to the Shining Path: it was confined to urban centers, lacked territorial control in the countryside, and had fewer members than the Shining Path<sup>23</sup>. Peru's government tuned its counterterrorism efforts against the two groups accordingly.

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17(Hoffman 1997)
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<sup>&</sup>lt;sup>18</sup>(Pluchinsky 1997)

<sup>&</sup>lt;sup>19</sup>(Kearns, Conlon and Young 2014)

<sup>&</sup>lt;sup>20</sup>(Onder 2023)

<sup>&</sup>lt;sup>21</sup>(Nef and Vanderkop 1988)

<sup>&</sup>lt;sup>22</sup>(Brown 2019)

<sup>&</sup>lt;sup>23</sup>(McCormick 1993; Brown 2019)

## A DIFFERENT RESEARCH APPROACH

The difficulty of demonstrating a relationship between credit claiming and counterterrorism encouraged us to come at the question from a different angle. Instead of examining whether counterterrorism efforts influence the likelihood of credit claims being issued, we ask whether credit claims compromise the survival of terrorist organizations that issue them? If credit claiming reduces the survival chances of terrorist organizations, then we have reason to continue searching for counterterrorism's effects on claim rates. If, however, we cannot establish a relationship between credit claiming and survival, then we may have a better understanding of the reasons for the non-findings that have characterized the literature so far. To date, work on the survival of terrorist organizations has focused on the violent tactics groups use<sup>24</sup>, the strength<sup>25</sup>) and ideological orientations<sup>26</sup> of perpetrating organizations, and the conditions under which terrorists operate<sup>27</sup> to predict group longevity.

This has borne fruit. The research suggests that: organizations that frequently target civilians typically persist for shorter periods than groups that avoid these attacks<sup>28</sup> because killing civilians is abhorrent to those that might otherwise support terrorism, creating backlash against perpetrators<sup>29</sup>; stronger groups usually outlast weaker ones because resource-rich organizations have more latitude to maximize the effectiveness of their attacks and provide for their own defense<sup>30</sup>; religiously oriented groups often outlive left-wing, right-wing, and ethno-nationalist organizations because they are less likely to be drawn into political processes than other terrorist organizations<sup>31</sup>; and groups with competitors endure longer than groups that without them because competitive situations foster innovations and force civilians to take sides in these conflict<sup>32</sup>. Terrorist organizations also survive longer in democratic states<sup>33</sup> and states experiencing civil conflict<sup>34</sup> than they do in

<sup>&</sup>lt;sup>24</sup>(Hou, Gaibulloev and Sandler 2020) <sup>25</sup>(Vittori 2009)

<sup>&</sup>lt;sup>26</sup>(Young and Dugan 2014)

<sup>&</sup>lt;sup>27</sup>(Gaibulloev, Piazza and Sandler 2024)

<sup>&</sup>lt;sup>28</sup>(Blomberg, Gaibulloev and Sandler 2011; Abrahms and Conrad 2017)

<sup>&</sup>lt;sup>29</sup>(Ross and Gurr 1989)

<sup>&</sup>lt;sup>30</sup>(Vittori 2009)

<sup>&</sup>lt;sup>31</sup>(Gaibulloev and Sandler 2013)

<sup>&</sup>lt;sup>32</sup>(Gaibulloev, Hou and Sandler 2020; Phillips 2015)

<sup>&</sup>lt;sup>33</sup>(Hoffman 2006)

<sup>&</sup>lt;sup>34</sup>(Gaibulloev, Piazza and Sandler 2024)

either non-democratic states or states experiencing domestic tranquility.

The work on the longevity of terrorist groups, however, has not examined the role that secrecy plays in sustaining their survival. Terrorists are presumed to depend on secrecy to survive<sup>35</sup>, but the fact that some groups publicly issue credit claims suggests that the value of anonymity is not absolute. What remains unclear is the extent to which terrorist organizations trade long-term security for short term publicity.

We build on the quantitative longevity research framework established by Hou et al. (2020) to answer this question. Consistent with the deterrence argument, we start from the premise that credit-claiming enables governments to identify, repress and, ultimately, defeat terrorist organizations. This premise creates the expectation that there is an inverse correlation between credit-claiming and the survival of terrorist organizations because credit claims expose terrorists to counterterrorism efforts, carried out by police and military forces. Specifically, we hypothesize the following:

**Hypothesis 1.** Terrorist groups that claim credit for violent events survive for less time than groups that do not claim responsibility for acts of terrorism.

**Hypothesis 2.** Groups that claim credit for terrorist attacks have a higher relative risk than groups that do not announce credit claims of having their operations terminated by the actions of police and military forces.

## RESEARCH DESIGN

Our tests of these relationships focused on 409 terrorist organizations, cataloged in the Extended Data on Terrorist Groups (EDTG) dataset<sup>36</sup>, that emerged between 1998 and 2016. The list of groups we studied includes groups like the Islamic State of Iraq and the Levant (ISIL), which started in the early 2000s, but not groups like the Irish Republican Army (IRA), which emerged in 1969. We observed each group in our sample annually (2785 group-years in total) from their creation dates to either the end of 2016 or when they ceased using terrorism.<sup>37</sup>.

<sup>&</sup>lt;sup>35</sup>(Kilberg 2012; Marone 2023)

<sup>&</sup>lt;sup>36</sup>(Hou, Gaibulloev and Sandler 2020)

<sup>&</sup>lt;sup>37</sup>We do not know the fates of groups that operated after 2016. These groups are *right-censored* in our analyses. Censored groups contribute information to our models up to the point of censoring, without being counted as "failures."

We focused on groups that the EDTG identifies as founded after 1997 because our data on credit claims, drawn from the Global Terrorism Database (GTD), begins in 1998<sup>38</sup>. Focusing on groups that started after 1997 is advantageous because it enables us to examine how the credit claiming histories of all the groups in our sample influenced their survival rates over our study period.

The disadvantage of this approach is that we cannot confidently extend our findings to groups that started prior to 1997. This limitation is unfortunate, but acceptable because what is most important at this stage is being able to identify a relationship between credit claiming and survival. Once that is accomplished, then it will be possible to ask about the generalizability of this relationship across space and time.

## Dependent Variables

We used two dependent variables. First, we measured the longevity of the groups in our study using the number of years of each organization operated between 1997 and 2016. Second, we used a categorical variable to characterize the fate of these organizations. Groups were described as 1) persisting throughout the study period; 2) permanently dismantled by military or police counterterrorism operations; 3) splintered apart; 4) ending their operations to take part in political/diplomatic processes; 5) merging with other groups; or having 6) faded away through inactivity. Both variables are drawn from the EDTG<sup>39</sup>.

## Independent Variables

We developed three separate group-level measures of credit claiming activity to represent our major independent variable. First, we assessed each group's claim rate by calculating the number of claims each group issued each year measured as a share of the total number of attacks they conducted over that period. The claim rate is derived from the GTD's credit claims indicator, which is coded "yes" when a group or person(s) affiliated with the group claimed responsibility for an attack (GTD Codebook, 46)<sup>40</sup>. Second, we used a log transformation of the number of claims groups

 $<sup>\</sup>overline{^{38}32\%}$  of groups did not conduct any attacks in the first year of their operations (Onder 2023).

<sup>&</sup>lt;sup>39</sup>(Hou, Gaibulloev and Sandler 2020)

<sup>&</sup>lt;sup>40</sup>The GTD accepts messages from a variety of media (e.g., emails, calls (pre or post incident), videos, online posts) as credit claims. The GTD does not specify whether group leaders, spokespeople, or rank-and-file members issue

issued each year<sup>41</sup>. Third, we tested a binary variable that separated groups that never issued credit claims from those that did. Data for all three variables was drawn from Onder's (2023) alignment of the GTD with the EDTG.

These credit claiming measures complement one another. Calculating the number of claims groups issue relative to the number of attacks they conduct is an intuitive way to represent credit claiming propensity. However, groups that attack and claim frequently can have the same claim rate as groups that attack and claim seldomly. Using the log transformation of the total number of claims groups announce each year addresses this issue. The binary measure provides the simplest method of distinguishing groups that rely on credit claims from those that do not.

We also accounted for other correlates of terrorist group survival. We accounted for each group's propensity to attack civilians using the logged number of civilian casualties. This variable is measured annually.

We assessed the strength of the groups in our study using three variables: *peak size*, an ordinal measure capturing the highest reported membership for a group measured in increments of 10, ranging from 10 to 10,000, *attack diversity*, a variable ranging from zero to one that assesses the variety of tactics groups use in their attacks in a given year, and *share transnational*, a variable that examines the proportion of transnational attacks groups conduct annually.

All three variables tap different dimensions of group capabilities. *Peak size* gauges the strength of groups in terms of the size of their memberships. *Attack diversity* assesses the ability of groups to use a range of tactics, a measure that gets at each group's available resources and cunning. *Share transnational* examines the ability of groups to conduct more expensive transnational attacks. The ability to attack across international boundaries reflects a group's resources and the ability of their operatives to work in different national contexts.

We controlled for each group's ideology using a series of binary indicators for religiously oriented groups, left-wing, right-wing, and ethno-nationalist organizations. In our models, we included binary indicators for these group types and used religious groups as our baseline.

We accounted for group competition using two measures. First, we used the logged sum of ri-

claims. In the appendix, we provide sample excerpts from the GTD incident descriptions to illustrate how claims are identified.

<sup>&</sup>lt;sup>41</sup>We added 1 to every group's credit claiming total so that groups that did not credit claim in a year were credited with zero credit claims rather than an undefined number.

val terrorist organizations each group faced to capture the intensity of the inter-group competition. This measure derives from the EDTG, which relies on Asal and Rethemeyer (2015) to compute the number of other militant groups that compete with the group in the same national context (e.g., MRTA vs Shining Path). We also used a binary measure to identify groups that were involved in credit claiming competitions with other terrorist groups. For each year of our study, we assigned a score of 1 to every group that either had a credit claim they issued challenged by another organization or that announced their responsibility for an act of terrorism that another group also claimed credit for.

We used several variables that account for characteristics of the states groups operate in<sup>42</sup>. These measures include GDP per capita (logged), and population (logged), both derived from the World Bank's World Development Indicators, internal conflict, incorporated from the Uppsala Conflict Program's UCDP project<sup>43</sup> and the Polity IV score (both squared and non-squared versions) to measure the base country's regime type<sup>44</sup>.

Finally, whether groups that issue credit claims are endangered by state counterterrorism efforts may be influenced by the noisiness of the environments terrorists operate in. The harder it is for governments to attribute blame for attacks, the easier it is for groups to evade detection regardless of whether they issue credit claims or not. We modeled this uncertainty or noise in the environment using a) unaffiliated attacks, where the perpetrator is identified but not linked to a group and b) unknown attacks (logged), where no information about perpetrators exists.

A table summarizing how each variable in our analyses is measured appears in the appendix as does a table of descriptive statistics.

## **RESULTS**

Our first set of analyses examine the association between credit claiming and group *longevity* using a Cox proportional hazard model. Our findings suggest that groups with higher credit claiming rates typically have shorter lifespans than groups that have lower *claim rates*.

Specifically, we find that groups that never issue credit claims have a roughly 95% survival rate

<sup>&</sup>lt;sup>42</sup>Just over 75% of groups we studied operate in a single country.

<sup>&</sup>lt;sup>43</sup>(Svensson, Schaftenaar and Allansson 2022)

<sup>&</sup>lt;sup>44</sup>(Marshall, Gurr and Jaggers 2019)

over 20 years, whereas groups that issue credit claims for half of their attacks, have a survival rate of just under 80%. The most at-risk groups are those that issue credit claims for every attack they launch. These groups have just a 40% survival rate. Figure 1 displays the survival rate over time for each of the credit claiming group types.

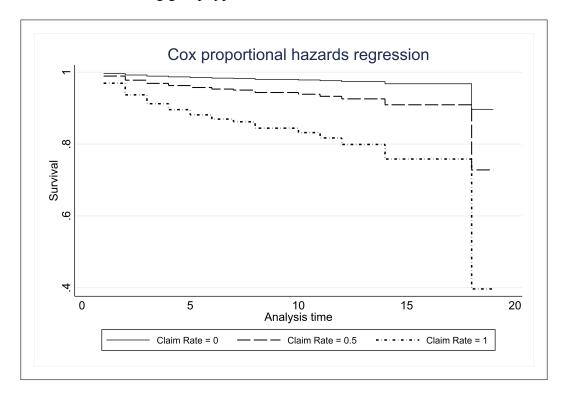
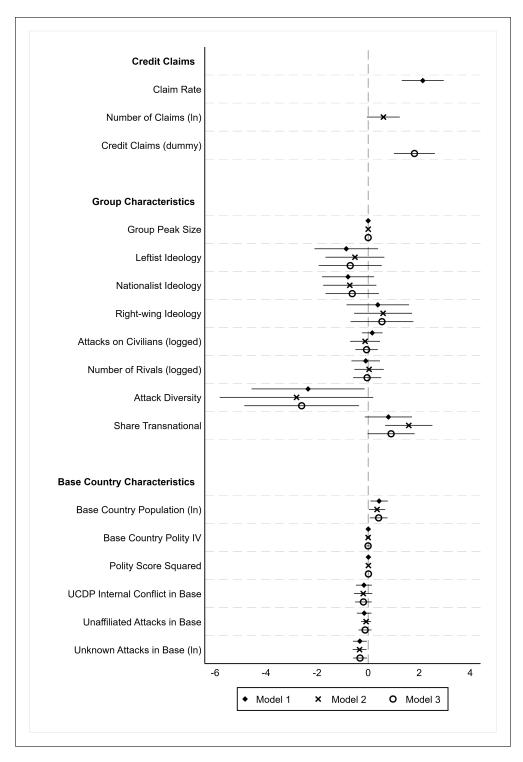


Figure 1. The Relationship between Credit-Claiming and Group Survival, 1998-2016

We replicated these results using the log of credit claims per year and a binary indicator for groups that issue claims versus ones that do not. The coefficient on the log of credit claims per year is marginally significant (p < .1), while the binary indicator is significant at the 99% level (b = 1.77, p < .01)<sup>45</sup>.

Figure 2 displays the coefficient estimates for each of the survival models we examined. The results in this figure were generated for all groups in our sample except ISIS, the most frequent credit claimer in our data set. Including ISIS alters the size of the coefficients we identified, but not the significance of the relationships we found. Tabular results detailing all our analyses appear in the Appendix.

<sup>&</sup>lt;sup>45</sup>Unlike the claim rate, the log of claims does not take total number of annual attacks per group into account. This may explain why this measure is less strongly associated with group longevity than our other measures. We thank the anonymous reviewer for pointing this out.



**Figure 2.** Credit Claims and Group Mortality (Coefficient Estimates)
Positive coefficients indicate increased mortality risk. The models represent credit claiming as follows: claim rate (Model 1), log of annual claims issued by each group (Model 2), claim/no claim (Model 3).

As expected, our analyses also suggest that the survival of terrorist organizations is related to a set of group level and contextual variables that influence the challenges associated with conducting illicit violence. Attack diversity and the share of transnational attacks that groups launch, two of the proxies we used to gauge group strength, are both related to group longevity. Groups that launch a wider variety of attacks tend to survive longer than groups that rely on a smaller range of violent tactics. On the other hand, groups that launch more transnational attacks as a share of their total attacks tend to have shorter lifespans.

The noisiness of the environments groups operate in, measured in terms of the number of unknown attacks in their states per year appears to cushion groups against demise. In contrast, groups are more likely to fail as the population sizes of the countries they operate in increase. We were unable to identify statistically significant relationships between our other control variables and the longevity of terrorist groups.

## Competing Risks Analysis

The second set of analyses we conducted focus on the reasons groups cease their operations. We accomplished this using a competing risk analysis. If credit claims enable governments to disable terrorist organizations, then we will see that pattern here.

That relationship, however, did not emerge (see Figure 3). No matter what measure of credit claiming we used, we could not rule out the possibility that credit claiming and counterterrorism are unrelated. Groups that operate in states experiencing significant internal conflict and groups that compete with one another over the ownership of attacks appear to be less likely to be terminated by police and military operations than other terrorist organizations, but none of these results are consistent with the idea that credit claiming puts terrorist organizations at risk from government efforts against them.

Instead of being disrupted by counterterrorism operations, credit claiming groups are more likely than other terrorist organizations to splinter apart, merge with other groups, or fade away through inactivity. Our findings are especially strong for merging and fading away (see the Appendix). These findings are more in line with the ideas that credit claims help groups forge alliances with other organizations and that credit claims provoke public backlash against those that issue them.

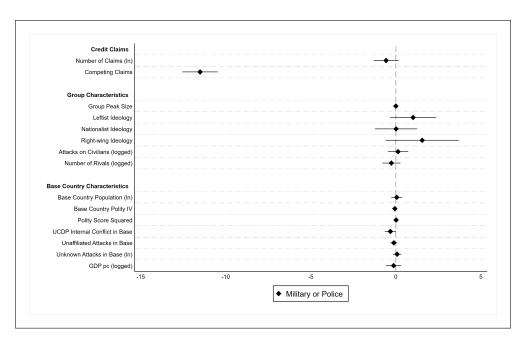


Figure 3. Competing Risk Analysis: Credit Claiming and Counterterrorism Effectiveness

Credit claiming groups may be as vulnerable to police and military counterterrorism efforts as non-credit claiming groups.

## Robustness Checks

We conducted several tests to examine the sensitivity of the findings from both our survival and competing risk analyses to different conditions. We first examined why several of the control variables we used in our models failed to reach conventional levels of statistical significance even though they have been shown to predict group survival in other studies. For example, we could not demonstrate that left-wing groups survive for less time than religious terrorist organizations even though this finding appears consistently in existing research<sup>46</sup>. Our working hypothesis was that these differences reflect the shorter time span we examined.

Using the complete EDTG data spanning the years 1970 to 2016, we replicated the core findings in the extant literature on group survival using the models we reported in Figure 2 minus the credit claiming variables (see Appendix Table 8). This confirmed our suspicion that our findings regarding control variables diverge from existing work in the field because of the shorter time frame we considered.

We also reexamined our survival models using several different measures of group strength.

<sup>&</sup>lt;sup>46</sup>(Gaibulloev, Piazza and Sandler 2024)

We utilized the logged count of total attacks, drawn from the GTD, to represent group capacity, since the number of attacks groups launch reflects the underlying size of their memberships<sup>47</sup>. Following Abrahms and Conrad (2017), we also include binary indicators of territorial control and state sponsorship, drawn from the EDTG. The number of attacks groups launch annually increases their lifespans (see Appendix Table 9). Territorial control and state sponsorship significantly reduce the probability of death, although the large number of missing observations for state sponsorship and territorial control (89% and 85%, respectively) mean these results must be interpreted with caution. The main takeaway from these analyses is that use of these alternate controls did not change the relationship between credit claiming and survival<sup>48</sup>.

We used Heckman sample selection probit models to assess the robustness of the competing risk analysis we conducted. Our results might reflect the difficulty of observing both credit claiming and police and military actions in states that restrict press freedom. The sample selection probit models we used enable us to examine whether the press' ability to report on government counterterrorism efforts biases our results.

The sample selection probit models, however, do not suggest that our analysis of the relationship between credit-claiming and counterterrorism successes is biased by unobserved sample selection. We modeled the selection process using a measure of press freedom drawn from the Quality of Government database<sup>49</sup>. This variable appears to be related to whether groups survive (b = .261, p = .004), but not whether groups are stopped by the efforts of police and/or military forces (p = -1.013, p = .147). The likelihood ratio test expressing the relationship between the two probit equations (p = .565) further implies that our results are unaffected by unobserved selection biases.

We also reexamined our competing risk analysis using the new variables we introduced to measure group strength. In comparative risk analyses (see Appendix Table 10), the number of attacks groups launched reduced the risk of group death via police and military means and reduced the inclination to merge with other organizations. Groups that control territory appear to be more

<sup>47(</sup>Clauset and Gleditsch 2012)

<sup>&</sup>lt;sup>48</sup>Table A9 displays juxtaposes models that include and exclude these indicators. Our first two columns utilize versions of the state sponsorship and territorial control variables that treat the missing observations as zeroes, based on the assumption that the groups that lack data on these indicators are too small to enjoy sponsorship or wield territorial control. Excluding these variables from models, as others typically do (e.g., Hou et al. 2020), does not change our core results.

<sup>&</sup>lt;sup>49</sup>(Teorell et al. 2023)

likely to terminate via mergers, while state sponsorship makes mergers and inactivity less likely. Importantly, our core findings regarding credit claiming did not change.

Finally, as an alternative additional measure on uncertainty, we introduced a (logged) count of attacks that are designated as "doubt terrorism proper" in the GTD. This measure assesses the difficulty governments have in identifying acts of terrorism, rather than identifying perpetrators. The results, available from the authors on request, corroborate our main findings, while the count of questionable attacks has a positive and insignificant coefficient on the probability of group demise.

## CONCLUSION

Whether people believe that credit claims help terrorist organizations or hurt them, these announcements are supposed to be consequential. Our research confirms this intuition: Terrorist organizations that issue credit claims are more likely to have shorter lifespans than groups that do not. This finding may help explain why credit claims are rare.

The surprise is that these proclamations cannot be connected credibly to an increased vulnerability to government counterterrorism efforts. Instead, credit claiming groups are more likely to merge with other terror organizations, splinter apart, or fade away through inactivity. These results are more in line with Pluchinsky's (1997) point that credit claims are too vague to serve as a reliable basis for counterterrorism responses.

Of course, the vagueness of credit claims does not explain why groups that issue them are more likely to merge with other organizations, splinter apart, or fade away. These patterns, particularly the tendency to splinter or fade away, imply that credit claiming organizations are often using their claims of responsibility to cope with weaknesses: internal divisions that threaten to break groups apart, declining memberships, or apathetic support networks.

In advancing this weakness hypothesis, we acknowledge that we are unable to rule out the possibility that groups issue credit claims only when they know they are strong enough to withstand government retaliation. This choosiness also might explain why we could not connect credit-claiming and counterterrorism effectiveness. Credit claims could be a lagging indicator of strength.

Nevertheless, there are too many inconsistencies between our results and the idea that only strong groups issue credit claims. The measures of group strength we employed do not provide

a clear sense of how these capabilities influence the strategies of terrorism. The tactical diversity of the attacks groups launched increased their survival rates. The percentage of attacks groups launched that crossed international boundaries decreased the longevity of groups. The size of a group's membership had no clear impact on survival. Moreover, none of these dimensions of group strength changed the likelihood that groups would meet their ends at the hands of police or military forces—hardly a sign that governments viewed these strong groups as especially dangerous.

Whether strong groups are more likely to issue credit claims in the first place is a question that requires further examination, but our work does not suggest that this is a promising line of analysis. Instead, our analysis is more in tune with Brown's (2019) work on differences between Peru's Tupac Amaru and Shining Path. Tupac Amaru used credit claims to project strength rather than doing the hard organizational work required to be strong. The Shining Path did the opposite, eschewing credit claims in favor of establishing ties to its community that helped support it in its conflict with Peru's government. Credit claims, paraphrasing McCormick (1993), helped Tupac Amaru look good rather than be good, a tendency that may be characteristic among credit claiming groups more generally.

## REFERENCES

- Abrahms, Max and Justin Conrad. 2017. "The Strategic Logic of Credit Claiming: A New Theory for Anonymous Terrorist Attacks." *Security Studies* 26:279–304.
- Abrahms, Max, Nicholas Beauchamp and Joseph Mroszczyk. 2017. "What Terrorist Leaders Want: A Content Analysis of Terrorist Propaganda Videos." *Studies in Conflict & Terrorism* 40:899–916.
- Asal, Victor H. and R. Karl Rethemeyer. 2015. "Big Allied and Dangerous (BAAD).". Accessed August 20, 2018.
- Blomberg, S. Brock, Khusrav Gaibulloev and Todd Sandler. 2011. "Terrorist group survival: Ideology, tactics, and base of operations." *Public Choice* 149:441–463.
- Bolt, Neville. 2012. *The Violent Image: Insurgent Propaganda and the New Revolutionaries*. New York: Columbia University Press.
- Brown, Joseph M. 2017. "Notes to the Underground: Credit Claiming and Organizing in the Earth Liberation Front." *Terrorism and Political Violence* pp. 1–20.
- Brown, Joseph M. 2019. *Force of Words: The Logic of Terrorist Threats*. Columbia University Press.
- Brown, Joseph M. 2021. "Terrorist Peer Review: Which Autonomous Attacks Does ISIL Accept for Publication?" *Studies in Conflict & Terrorism* pp. 1–18.
- Clauset, Aaron and Kristian Skrede Gleditsch. 2012. "The Developmental Dynamics of Terrorist Organizations." *PLOS ONE* 7(11):e48633.
- Gaibulloev, Khusrav, Dongfang Hou and Todd Sandler. 2020. "How Do the Factors Determining Terrorist Groups' Longevity Differ from Those Affecting Their Success?" *European Journal of Political Economy* 65:101935.
- Gaibulloev, Khusrav, James A. Piazza and Todd Sandler. 2024. "Do Failed or Weak States Favor Resident Terrorist Groups' Survival?" *Journal of Conflict Resolution* 68(5):823–848.
- Gaibulloev, Khusrav and Todd Sandler. 2013. "Determinants of the Demise of Terrorist Organizations." *Southern Economic Journal* 79(4):774–792.
- Hansen, Tanja Marie. 2021. "Fifty Shades of Terrorist Credit-Taking: A Review of the Existing Scholarship on Terrorist Credit-Taking." *International Studies Review* 23:1370–1398.

- Hansen, Tanja Marie. 2022. "Time Is of the Essence: Temporality and Competition as Drivers of Terrorist Credit-Taking." *Terrorism and Political Violence* pp. 1–18.
- Hoffman, Aaron M. 2010. "Voice and Silence: Why Groups Take Credit for Acts of Terror." *Journal of Peace Research* 47:615–626.
- Hoffman, Bruce. 1997. "Why Terrorists Don't Claim Credit." *Terrorism and Political Violence* 9:1–6.
- Hoffman, Bruce. 2006. Inside Terrorism. New York: Columbia University Press.
- Hou, Dongfang, Khusrav Gaibulloev and Todd Sandler. 2020. "Introducing Extended Data on Terrorist Groups (EDTG), 1970 to 2016." *Journal of Conflict Resolution* 64:199–225.
- Kearns, Erin M. 2021. "When to Take Credit for Terrorism? A Cross-National Examination of Claims and Attributions." *Terrorism and Political Violence* 33:164–193.
- Kearns, Erin M., Brendan Conlon and Joseph K. Young. 2014. "Lying About Terrorism." *Studies in Conflict & Terrorism* 37(5):422–439.
- Kilberg, Joshua. 2012. "A Basic Model Explaining Terrorist Group Organizational Structure." Studies in Conflict & Terrorism 35:810–830.
- Marone, Francesco. 2023. "Dilemmas of the Terrorist Underworld: The Management of Internal Secrecy in Terrorist Organisations." *Behavioral Sciences of Terrorism and Political Aggression* 15:336–360.
- Marshall, Monty G., Ted Robert Gurr and Keith Jaggers. 2019. "Polity IV Project: Political Regime Characteristics and Transitions, 1800–2018.".
- McCormick, Gordon. 1993. "Sharp Dressed Men: Peru's Túpac Amaru Revolutionary Movement.".
- Nef, Jorge and J. Vanderkop. 1988. "The Spiral of Violence: Insurgency and Counter-Insurgency in Peru." *Canadian Journal of Latin American and Caribbean Studies* 13:53–72.
- Onder, Ilayda B. 2023. "Signaling Resolve through Credit-Claiming." *International Interactions* 49:755–784.
- Pape, Robert A. 2003. "The Strategic Logic of Suicide Terrorism." *American Political Science Review* 97:343–361.
- Phillips, Brian J. 2015. "Enemies With Benefits? Violent Rivalry and Terrorist Longevity." *Journal of Peace Research* 52(1):62–75.

- Phillips, Brian J. and Viridiana Ríos. 2020. "Narco-Messages: Competition and Public Communication by Criminal Groups." *Latin American Politics and Society* 62:1–24.
- Pluchinsky, Dennis A. 1997. "The Terrorism Puzzle: Missing Pieces and No Boxcover." *Terrorism and Political Violence* 9:7–10.
- Ross, Jeffrey Ian and Ted Robert Gurr. 1989. "Why Terrorism Subsides: A Comparative Study of Canada and the United States." *Comparative Politics* 21(4):405–426.
- Shapiro, Jacob N. 2013. The Terrorist's Dilemma. Princeton University Press.
- Svensson, Isak, Susanne Schaftenaar and Marie Allansson. 2022. "Violent Political Protest: Introducing a New Uppsala Conflict Data Program Data Set on Organized Violence, 1989-2019." *Journal of Conflict Resolution* 66:1703–1730.
- Teorell, Jan, Nicholas Charron, Stefan Dahlberg, Sören Holmberg, Bo Rothstein, Petrus Sundin and Richard Svensson. 2023. "The Quality of Government Dataset.". January 23 edition.
- Vittori, Jodi. 2009. "All Struggles Must End: The Longevity of Terrorist Groups." *Contemporary Security Policy* 30(3):444–466.
- Young, Joseph K. and Laura Dugan. 2014. "Survival of the Fittest: Why Terrorist Groups Endure." *Perspectives on Terrorism* 8:2–23.