Civilian Abuse, Wartime Informing, and Counterinsurgent Operations*

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Abstract

Civilian support is central to the success of counterinsurgent campaigns. Harm to civilians, and who harms them, influences when and with whom non-combatants collaborate. We first show there is strong historical evidence regarding the importance of civilian cooperation in asymmetric civil wars since WWII. Then, drawing on newly declassified military records as well as survey data, we find robust direct evidence that civilians respond to insurgent victimization by providing intelligence to security forces in Afghanistan. Finally, we show that these tips improve the success of subsequent counterinsurgent operations. These results clarify the conditions under which civilian casualties can shape the course of internal wars.

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What are the strategic effects of civilian victimization in civil war? Classic theories of counterinsurgency (Galula 1964; Thompson 1966), as well as modern theories of the strategic logic of violence (S. N. Kalyvas 2006; Valentino 2014), assert that civilians condition their support of armed actors on how they are treated, an argument formalized in recent work (Berman, Shapiro, and Felter 2011). One particularly valuable component of non-combatant support is the provision of local intelligence on insurgent activity, including rebel recruitment, force movement, and planned attacks. As S. N. Kalyvas (2006, 174) observes, "[i]t is widely accepted that no insurgency can be defeated unless the incumbents give top priority to and are successful in building an intelligence organization." Civilian abuse, therefore, can shape the course of internal conflict through its effects on civilian sharing of sensitive information.

In their review of this research agenda, Berman and Matanock (2015) note that direct evidence on theories of asymmetric conflict centered around civilian sharing of information is largely missing. Instead, researchers have leveraged increased access to survey and conflict microdata to test the observable implications of informational theories and have shown that: (1) self-expressed willingness to inform is linked to coethnicity with security services in surveys from Afghanistan (Lyall, Shiraito, and Imai 2015); (2) in Iraq, technological changes—which reduce the risks to informing—are associated with lower intensity of insurgent activity (Shapiro and Weidmann 2015); and (3) insurgent-initiated violence in Iraq at the district level is lower in the week following insurgent attacks that injure or kill non-combatants in that district, and higher in weeks after Iraqi or American forces did so (Condra and Shapiro 2012a). The latter finding is consistent with civilians responding to harm from insurgents by withdrawing their support and sharing intelligence with security forces, but is not direct evidence. And prior work also tended to focus only on one step at a time.[1] This dearth of direct empirical evidence for all steps in the theory is due in no small

1. Shaver and Shapiro (forthcoming), for example, provide evidence from Iraq that harm to civilians influences hotline tips, but do not evaluate the downstream impact on counterinsurgent activity. Schutte (2017) studies how harm influences one battlefield outcome (IED

part to the lack of available data on actual information sharing. As Lyall, Shiraito, and Imai (2015, 833) observe: "Information about insurgent groups is a central resource in civil wars: counterinsurgents seek it, insurgents safeguard it, and civilians often trade it. Despite its essential role in civil war dynamics, the act of informing is still poorly understood, due mostly to the classified nature of informant 'tips.'"

Moreover, the observable implications of a shift in wartime informing are often consistent with other explanations of violent outcomes. A decline in insurgent activity following an incidental civilian casualty could also be due to active opposition to rebel control, a refusal to pay "revolutionary taxes" to fund insurgent operations, or a significant decline in recruitment (Berman, Shapiro, and Felter 2011, 811). Similarly, counterinsurgent operations that cause harm to non-combatants provide insurgents with a persuasive tool for mobilizing the civilian population against government forces. Successful insurgent attacks could thus increase following state-initiated harm, either because civilians do not share intelligence to thwart these rebel attacks, or because the insurgents simply have more fighters they can deploy or more financial resources to pay for attacks.

The central contribution of this research note is to show first that there is systematic historical evidence across dozens of conflicts for the relational chain posited by informational theory, and then second to provide a direct quantitative assessment of the strength of the relationship. We survey prominent works on asymmetric conflicts since WWII, finding civilian cooperation was viewed as critical by historians for a considerable number of conflicts. We then use newly declassified data on insurgent attacks that caused civilian casualties, as well as incidents of civilian intelligence sharing with the government, between 2006 and 2014 in Afghanistan. We find that harm to civilians affects information flow and that changes to that flow directly affect counterinsurgency effectiveness, as measured through meaning-

turn in's), but lacks an evaluation of civilian information sharing and relies on leaked data covering a shorter time period than we do. And Lyall, Blair, and Imai (2013) study how civilians' views of harm depend on the identity of the perpetrator.

ful operational outcomes such as government missions to clear roadside bombs, neutralize weapons factories, conduct safehouse raids, and detain suspected insurgents. This combination of broad historical evidence with micro-level data on the full causal chain provides the most complete evidence yet that civilian cooperation is a *central resource* in civil wars.

Historical Cross-Conflict Evidence

From at least the early-1970s military officers writing on counterinsurgency have emphasized the centrality of information.[2] This suggests that information theory should apply to irregular asymmetric conflicts broadly, though how tightly it binds in each case will vary depending on context-specific factors.

Information theory has been formalized in various ways. Berman, Shapiro, and Felter (2011) model a three-way interaction between citizens with political preferences over who controls the territory, insurgents seeking to impose costs on the government, and a government balancing its efforts between militarized counterinsurgency and public goods provision. Khanna and Zimmerman (2017) study a similar interaction but shift the order of play and have rebels fighting over territory vs. simply seeking to cause harm. Vanden Eynde (2018) focuses on the two-way interaction between rebels and civilians but focuses on how shocks to the normal economy shape the capacity of rebels to attack government forces and their incentives to deter information sharing through violence against civilians.

All these variants implicitly or explicitly make four claims:

- information sharing by civilians shapes battlefield outcomes;
- information sharing helps the receiving party (government or insurgent);

2. For example, British General Sir Frank Kitson famously argued of the campaign in Malaya that "[i]f it is accepted that the problem of defeating [an insurgent] consists largely of finding him, it is easy to recognize the paramount importance of good information" (Kitson 1971, 58).

- civilians share operationally relevant information in equilibrium; and
- civilians respond to harm by decreasing/increasing information sharing.

To assess how widespread is the evidence in support of the causal process posited by information theory, we conducted brief case studies of all but three of the conflicts since 1970 on the list of irregular asymmetric conflicts in Kalyvas and Balcells (2010), as well as more recent conflicts we judged to meet their criteria.[3] For each case, we researched whether there was evidence for each of the four claims above by examining prominent histories, journalistic accounts, and research articles.

Out of 83 irregular asymmetric civil wars coded from 1944 through 2018, we found evidence that at least one side thought information sharing mattered in 51 of them. For example, during the First Sudanese Civil War (1963-1972), "men were temporarily recruited in 'friendly' villages to pursue 'outlaws'. In this conflict, the warring parties expanded violent control of local populations to the individual level. Their recruitment of informers, scouts and 'home guards' during the 1960s formed the basis for a fine-meshed intelligence network and, in the last years of the first civil war, local government authorities in the south also established a formal system of National Guards (Aras Watani) as informers and armed auxiliary troops" (Kindersley and Rolandsen 2019, 390). We see evidence of this in the Moro Insurgency in the Mindanao region of the Philippines: "Additionally, the GRP [Government of the Philippines] has supplemented its control of the region with the help of village-based civilian militias called Citizen Armed Force Geographic Units (CAFGUs) and 'village watch' and intelligence gathering units called 'civilian voluntary organizations' (CVOs)" (Chen 2015, 64). The white-minority Rhodesian government that fought against

3. We did not collect data on the conflict in Pakistan in 1973 as it is covered by sources on the conflict that Kalyvas and Balcells (2010) code as Bangladesh 1974. The Ethiopian, Indonesia, and Philippine civil wars in the 1970s all enter the data multiple times within a 5-year period. For each we just code the first occurrence. We did not collect data on the conflict in Guatemala, which began in 1966.

the Zimbabwe African People's Union and the Zimbabwean African National Union in the 1970s even tried to incentivize civilian information sharing through reward and punishment: "In due course it was made a punishable offence not to report the presence of guerrillas in an area, and rewards of Rh$5,000 or more were offered for information leading to the death or capture of guerrillas and the seizure of arms caches" (Moorcroft and McLaughlin 2008, 400).

Second, we find evidence that information helps the receiving party in 45 of the cases reviewed. In Colombia's civil conflict, the FARC suffered because of information passed on to the government side: "In the Middle Magdalena Valley, deserters like Berta were the corner-stone of the paramilitary strategy. Dozens of them helped the right-wing groups identify and, in some cases, kill rebel collaborators" (Dudley 2006, 57). In El Salvador's civil war, information sharing was a key resource for rebel tactical planning: "campesinos collected information about Salvadoran military patterns; a better understanding of official patterns increased the probabilities for successful guindas because it meant that campesinos could predict what was to come and respond accordingly" (Todd 2010, 62). And in Sri Lanka, "the JVP were dependent for security on the support or acquiescence of surrounding populations, and thus very vulnerable once this support was withdrawn and information began to be passed on to the security forces on a substantial scale" (Moore 1993b, 602).

Third, civilians provided operationally relevant information in 53 of the conflicts. In Nigeria's conflict with Boko Haram, "The police also work with local communities, through community public relations committees, which meet intermittently to exchange information to prevent and combat crime (including terrorism)" (Akinola, Khan, and Faluyi 2019, 94). In Mali's ongoing conflict against terrorist groups, "in Timbuktu, one officer reported receiving numerous calls a day from locals wishing to provide information on enemy movements" (Shurkin, Pezard, and S. Zimmerman 2017, 72). In its conflicts with Latvia (LTSPA) and Lithuania (BDPS), the USSR relied on civilian informing. "Thus, according to Soviet data, 3,597 secret informers, agents and residents were engaged in the struggle against the national partisans in January 1947" (Komisija 2008, 290) and "In other regions, the informer network was less numerous but growing with every month; the Lithuanian police had 27,700 informers by 1951" (Statiev 2010, 235). And in the insurgency in the Dhofar region of Oman in the 1970s, "For the most part, however, the information gained by the Intelligence Corps personnel was overwhelmingly derived from human intelligence sources (HUMINT), most notably informers and, of crucial importance, surrendered enemy personnel (SEPs)" (Jones 2011, 566).

Finally, civilians responded symmetrically to harm in 11 conflicts. In Nepal's Maoist insurgency, "it appears that the Maoists obtained food largely irrespective of whether or not the populace were attitudinally supportive, but that this was not the case with information" (Khalil, 236). There is some evidence of this in Chechnya, as well. "In keeping with the code of silence, Chechens largely refused to provide internal information to the Russian military and secret services during the First Chechen War, including information on the identities of insurgents, their supporters, and relatives. In contrast to a number of other (counter)insurgencies elsewhere in the world where locals have often been eager to supply incumbents with information on the insurgents and their social networks in an attempt to obtain benefits, the Chechens stubbornly resisted dragging outsiders into what they considered to be their own internal issues. As one interviewee observed, 'on many occasions, the Russian officers approached us offering various things... Money, cattle, security [...] in exchange for information about the fighters. Naturally, we refused, because it's not a Chechen habit to rat on your people'" (Souleimanov and Aliyev 2015b, 30-31). And in Thailand's southern insurgency, "More informants in Muslim areas were reported to have been available because local people were growing weary of the violence and intimidation exercised by insurgent groups" (Askew 2008, 195). Most cases included evidence that both negative and positive inducements were offered to motivate information sharing in many more cases (e.g. threats, jobs, public goods provision, etc.). For a full list of conflicts considered see Appendix table SI-12, which includes coding and exemplary quotes for each question.

In summary, this cross-conflict analysis shows that across a broad set of cases that fits the scope conditions of the informational theory, there is considerable evidence that the theory applies. To more precisely assess how civilian abuse affects information flow to armed actors and how information affects counterinsurgent effectiveness, we turn next to a micro-level and systematic analysis of these dynamics in Afghanistan.

Afghanistan Empirical Design

This section reviews the novel military records used to track civilian abuse and wartime informing and introduces our identification strategy.

Data

The newly declassified military records on insurgent activity, harm to civilians, and intelligence reports were compiled by both International Security Assistance Force (ISAF) and Afghan forces (ANDSF). These records of significant activities (SIGACTS) cover 2003 through 2014, documenting more than 270,000 separate events, including: insurgent attacks on government forces, harm to civilians, and civilians' provision of local intelligence to security forces. The data were collected systematically by security forces, not derived from media sources, which avoids concerns about reporting biases in data collected from newspapers and other media, both in Afghanistan and in other conflicts (Weidmann 2016).[4] These data are the most complete account of security operations in Afghanistan currently in the public domain (see SI section A.1).

4. Weidmann (2016, 210-211) describes the military records used in our study as the "universe" of insurgent-initiated combat activity.

We observe details on 97,006 intelligence collection events. These represent a combination of calls to anonymous hotlines, one-off tips from direct civilian-to-security force interactions and reporting by cultivated sources, but do not include intelligence derived from monitoring insurgent communications.[5] Our data contain records on 120,247 direct fire, 28,974 indirect fire, and 38,205 IED explosion events. To measure civilian abuse by insurgents, we isolate all insurgent-initiated attacks that caused either a civilian injury or death that was observed by or occurred in the presence of government forces. Following previous literature, we treat injuries and deaths as casualty events. Importantly, since these casualties occur in the context of violence between insurgents and government forces, they are collateral damage; they should not be considered discriminate violence targeted at civilians, which do not enter the data. We analyze the effects of this collateral damage because this type of harm to civilians is central to the relevant theory.

We restrict our main analysis to insurgent-inflicted harm to civilians because while our data account for all insurgent-initiated engagements with coalition and host nation forces that also injure or kill civilians, we have not been able to obtain similarly systematic records of government harm to civilians due to the sensitivity of such information. We supplement our main analysis with additional results drawn from survey data. These additional results demonstrate that omitting coalition-initiated civilian casualties is highly unlikely to bias the main analysis substantially.

Estimation Strategy

How does insurgent abuse affect information sharing by civilians?

To estimate the effect of civilian abuse by insurgents on information sharing with security forces, we begin with the assumption that, conditional on appropriate controls for trends

5. Author interview with senior official responsible for data collection and management, May 24, 2017.

in the conflict, collateral damage to civilians caused by insurgent attacks on military forces is "as if" randomly assigned. This approach is the benchmark specification in previous work (Condra and Shapiro 2012a; Shaver and Shapiro, forthcoming). After conditioning out district and week fixed effects, as well as short-run trends in overall violence, we identify the residual variation in civilian abuse that is arguably random. We conduct our analysis at the district level because this is the level at which ISAF, ANSF, and Taliban forces were organized during the campaign. To begin, we sum all collected intelligence reports, all insurgent attacks with civilian casualties, and all insurgent operations—including direct line-of-sight attacks, indirect mortar and rocket engagements, and improvised explosive device (IED) detonations—by district-week and standardize per 1,000 district inhabitants. Our base model is captured by equation 1:

$$Y^a_{dt} = \alpha + \beta_1 CIVCAS_{dt-1} + \zeta_j \sum_{j=1}^{4} (V_{dt-k}) + \mu_d + \eta_t + \epsilon_{dt} \tag{1}$$

where Y^a_{dt} is the number of intelligence reports shared with counterinsurgents in district d in week t where the superscript a indicates the type of tip ((1) all tips, (2) threats to COIN forces, (3) threats to civilians, (4) tips about insurgent activity); $CIVCAS_{dt}$ is the sum of insurgent attacks resulting in civilian harm in a given district; V_{dt-k} is the lagged sum of insurgent attacks in previous week k (direct fire, indirect fire, IED explosions); μ_d is a district fixed effect; η_t denotes a week fixed effect; and ϵ_{dt} is the error term. In all models we cluster standard errors at the district level, and regressions are weighted by district population.

Views regarding combatant efforts to avoid harm and attitudes on informing

Despite authors' repeated efforts over several years to gain access to declassified data detailing government-caused civilian casualties, neither U.S. Central Command nor other agencies intend to release this information. This could lead to biased estimates under two scenarios. First, we may worry that insurgent and government harm occur in offsetting-cycles, such that harm caused by insurgents is correlated with future (but not present) government harm. This would imply that insurgent and government harm are negatively correlated. If government harm is also negatively correlated with tipping (as the informational theory hypothesizes), then our estimates of the impact of insurgent harm would be biased upward (larger magnitude) since government harm remains an omitted variable. Second, civilians might react to relative harm—which actors hurt them more—as opposed to absolute harm. This would lead to a similar type of bias in our estimates. While we cannot evaluate these patterns quantitatively, we have not found systematic qualitative evidence suggesting these dynamics occurred in Afghanistan.

We therefore turn to survey data for evidence that neither of these mechanisms drives the results. We study the relationship between self-reported willingness to inform (the survey analogue of tipping) and perceived level of care that government or insurgent forces exercise to avoid harming civilians (the survey analogue of measured harm) in eight waves of the Afghanistan Nationwide Quarterly Assessment Research (ANQAR) survey from 2013 to 2015 ($n = 99,666$ respondents). The survey included questions about insurgent *and* government attempts to avoid civilian harm as well as the willingness of respondents to report roadside bombs (see data description in SI section A.2 for more details).

Since we observe perceived harm by both actors, we can evaluate (a) whether we replicate the results from the observational data and (b) if our estimates of that relationship are sensitive to omitting measures of government harm using equation 2:

$$Y_{idw} = \alpha + \beta_1 GovtNoEffort_{idw} + \beta_2 InsNoEffort_{idw} + \gamma X_i + \mu_d + \eta_w + \epsilon_{idw} \quad (2)$$

where Y_{idw} is whether or not an individual i is 'very likely' to report IED placement to security forces in district d and survey wave w; $Govt/InsNoEffort_{idw}$ is perception that the government/insurgents do not do enough to prevent civilian casualties; μ_d is a district fixed effect; η_w is a survey wave fixed effect; X_{idw} is a vector of individual-level demographic controls that vary across specifications; and ϵ_{idw} is the error term. In all models we cluster standard errors at the district level, and regressions use district-specific survey weights.

How do civilian tips affect battlefield outcomes?

Informational theory hypothesizes that civilian cooperation positively influences counterinsurgents' battlefield success. To quantitatively investigate whether variation in information flow is strategically valuable, we estimate the short term conditional correlation between tipping and various counterinsurgent operations controlling for trends in combat violence and insurgent harm using equation 3:

$$Y^b_{dt} = \alpha + \beta_1 Tips_{dt-1} + \zeta_j \sum_{j=1}^{4}(V_{dt-j}) + \theta_j \sum_{j=1}^{4}(CIVCAS_{dt-j}) + \mu_d + \eta_t + \epsilon_{dt} \tag{3}$$

where b denotes the type of counterinsurgent outcome in Y^b_{dt}, which can be the number of (1) roadside bombs found and cleared, (2) weapons caches found, (3) safe house raids, or (4) insurgents captured and detained in district d in week t. $Tips_{dt}$ is the sum of all tips or the sum of tips specifically related to IED deployment in a given district-week. As in equation 1, we control for previous levels of insurgent violence. Accounting for violence—including IED deployment—means that any change in the outcome variable associated with tips is not confounded by shifting intensity of combat activity. We also control for previous levels of insurgent-caused civilian casualty events. All models are weighted by district population and include district and time fixed effects. We cluster standard errors at the district level.

Results

Insurgent abuse increases civilian tips to security forces

We find that civilian abuse by insurgents is associated with a significant increase in information sharing with state security forces. These results are robust across different kinds of tips and substantial in magnitude. Table 1 shows the estimated impact of civilian abuse on wartime informing using equation 1. The dependent variable in Column 1 is tips aggregated across all types. Columns 2-4 decompose tips by type: threats to counterinsurgents; threats to civilians; and insurgent activities.

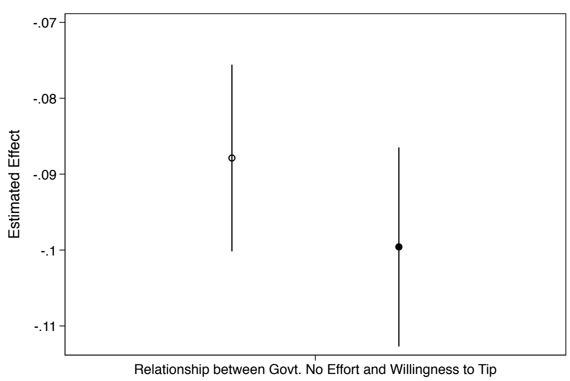
Across specifications, there is a statistically significant association between (lagged) insurgent attacks that result in civilian casualties and the number of tips that counterinsurgents receive from civilians. A one standard deviation increase in attacks resulting in civilian casualties (0.415 more civilian casualty events per week in an average sized district) is associated with a 18% increase in informant reports over the weekly mean level (Column 1). This overall effect is largest for tips related to threats against counterinsurgents (2), but there are also statistically significant increases in tips on threats to civilians (3) and insurgent activities (4).

Those who feel insurgents do not try to avoid harming civilians express greater willingness to inform

To address potential concerns that these results are substantially biased by the absence of government-caused (unintended) civilian casualties in our main specification, we report on the relationship between self-expressed willingness to inform and perceived level of effort in avoiding civilian harm in Table 2 (estimated via equation 2). The magnitude of these effects is large, with those reporting they think insurgents do not try to avoid killing civilians being approximately 25% more likely (relative to the baseline mean of .442) to say they are 'very likely' to provide a tip on an IED if they know about one. These additional results highlight the attitudinal mechanism that underlies the informational theory and the behavioral findings reported earlier. We include this specification, however, to address the potential bias that missing information on Coalition abuse might cause. We can investigate this question here because we observe data on perceived effort by insurgents *and* security forces and can examine how including or excluding each measure effects the estimated effect of the other measure.

To ease interpretation, we depict these results visually in Figures 1a and 1b. The size and significance of the association between willingness to tip and perceived lack of insurgent effort to minimize harm to civilians is in the direction predicted by the informational theory and moves by less than 1% with the inclusion or exclusion of the corresponding measure of perceived government effort. The estimated coefficients are statistically indistinguishable when we compare models with and without the data missing from our main specification (Coalition abuse).

Figure 1: Civilians' willingness to tip as function of perceived effort by armed actors to minimize harm to civilians



(a) Government

(b) Insurgents

Notes: Panel A displays the estimated effect of no perceived Government effort to minimize civilian harm on willingness to tip when the model includes the variable on no perceived Insurgent effort (open circle, Column 3 of Table 2) and when the model excludes the variable (filled circle, Column 4 of Table 2). Panel B displays the estimated effect of no perceived Insurgent effort to minimize civilian harm on willingness to tip when the model includes the variable on no perceived Government effort (open circle, Column 3 of Table 2) and when the model excludes the variable (filled circle, Column 5 of Table 2). Bars indicate 95% confidence intervals.

Civilian tips improve battlefield outcomes

We next report how information sharing affects meaningful operational outcomes. In Table 3 we show the effects on IEDs found and cleared (Column 1), weapons caches found and cleared

(2), insurgents captured (3), and tactical safe house raids (4). Insurgent-inflicted civilian casualties lead to a subsequent increase in each of these operational outcomes that are vital to the success of counterinsurgency. The effects are substantively large. A one standard deviation increase in IED-related tips (0.616 more IED-related tips per week in an average sized district), for example, is associated with a 16.8% increase in roadside bombs found and cleared over the weekly mean level. Recall that these model specifications account for shifts in the intensity of violence, enabling us to address concerns about potentially confounding factors. For example, one might be concerned that tips about IED deployment and IEDs neutralized may be mechanically correlated with the number of IEDs deployed. We can rule this out since our model partials out the variation in IEDs cleared that is correlated with shifts in IED deployment.[6]

Together with the evidence on increased information sharing, this stands as remarkably strong and consistent evidence that harm inflicted on civilians in civil war has strategic consequences.

Associations between abuse and tips, tips and battlefield outcomes are robust

In Supporting Information (SI), we provide a series of robustness checks for the main results. First, we evaluate whether there is a substantial difference in estimated magnitudes across the full sample relative to the period characterized by the most intense annual fighting season (Tables SI-3, SI-4, SI-5 and SI-6). Results are largely unaffected. Second, we estimate the models with four lags of the dependent variable as added regressors (Tables SI-7 and SI-8). Third, we estimate unweighted regressions (Tables SI-9 and SI-10). Fourth, we provide fur-

6. One alternative to this specification would be to study the clear-rate: the percentage of IEDs deployed that are neutralized before they detonate. The central concern we have with this approach is econometric: the clear-rate is undefined for district-weeks which experience no IED activity. This would create an unbalanced panel, breaking the panel difference-in-differences (unit and time fixed effects) approach we take here.

ther evidence that the informational mechanism drives the effects of tips on counterinsurgent outcomes. While the estimated coefficients on all (lagged) tips and (lagged) tips specifically on IEDs deployed are statistically significantly related to IEDs and weapons caches found as outcomes, the size of the effect of specific tips is substantially larger (Table SI-11).

Conclusion

In this manuscript, we present a direct, comprehensive, multi-method empirical test of the information sharing theories of civil war that have shaped the academic study and military doctrine of counterinsurgency for the last half century. Governments' political and military success depend on civilians sharing critical information about insurgent identities, whereabouts, and activities. Civilians, in turn, punish combatants for harming them by withholding support and local intelligence. While we provide compelling evidence connecting civilian harm, information sharing, and counterinsurgent operations, a macro-level political-military strategy involves broader considerations. As critics of the campaign in Afghanistan have argued, in addition to consolidating military control, foreign assistance must increase the legitimacy of the host government and its capacity for governance (Eikenberry 2013). Information sharing may help government forces win battles; a broader strategy is required to win wars.

We highlight several promising avenues for future research. First, the willingness of civilians to share information may be mediated by the type, intensity, and spatial proximity of combatant abuse. Second, information-sharing might influence other wartime dynamics, including the resolve and capacity of insurgents to fight and the ability of rebels to credibly bargain with state rivals. If insurgents know that civilian abuse affects information sharing, then engaging in civilian abuse is a particularly costly signal of insurgent resolve and capability. Finally, winning local support for counterinsurgent campaigns is a core motivation of military aid provision and drives many recent empirically-focused social science articles investigating the effects of aid as a tool to win "hearts and minds" and thereby both establish territorial and popular control and reduce insurgent violence (**berman˙2011˙can**; Crost, Felter, and Johnston 2014; Lyall, forthcoming; Sexton 2016). Yet we still know relatively little about how civilian sympathies and insurgent strategy respond to these aid interventions.

The insights of this paper are relevant to a number of ongoing conflicts. Although our quantitative analysis focuses on insurgent-initiated civilian abuse, our results speak to harm caused by government forces as well. They suggest that attempts to minimize civilian harm will likely help government forces more effectively combat insurgencies and thereby contribute to rebuilding social and political order.

Table 1: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces

	(1) All Tips	(2) Threats to COIN Forces	(3) Threats to Civilians	(4) Tips about Insurgent Activity
CIVCAS (1 Week Lag)	0.189***	0.128***	0.00953***	0.0333*
	(0.0519)	(0.0325)	(0.00340)	(0.0172)
Summary Statistics				
Outcome Mean	0.00804	0.00529	0.000374	0.00304
Outcome SD	0.0284	0.0201	0.00289	0.0138
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
Model Statistics				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. All models are weighted by district population and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 2: Civilians' willingness to tip as function of perceived effort by armed actors to minimize harm to civilians

	(1) Baseline	(2) Baseline w. Political Controls	(3) Baseline w. Political and Security Controls	(4) Baseline w. Political and Security Controls	(5) Baseline w. Political and Security Controls
Govt. No Effort	-0.103***	-0.0951***	-0.0879***	-0.0996***	
	(0.00829)	(0.00786)	(0.00746)	(0.00795)	
Ins. No Effort	0.115***	0.112***	0.108***		0.112***
	(0.00703)	(0.00691)	(0.00661)		(0.00674)
SUMMARY STATISTICS					
Outcome Mean	0.442	0.442	0.442	0.442	0.442
Outcome SD	0.497	0.497	0.497	0.497	0.497
PARAMETERS					
District FE	Yes	Yes	Yes	Yes	Yes
Demographic Controls	Yes	Yes	Yes	Yes	Yes
Interacted Model	No	Yes	Yes	Yes	Yes
Govt. going Wrong Direction	No	Yes	Yes	Yes	Yes
Police Patrols Weekly	No	No	Yes	Yes	Yes
Village Insecure	No	No	Yes	Yes	Yes
Taliban Gaining Strength	No	No	Yes	Yes	Yes
MODEL STATISTICS					
N	99666	99666	99666	99666	99666
Clusters	377	377	377	377	377

Notes: Outcome of interest is respondent reporting being 'very likely' to report tip on IED if known (from ANQAR survey waves 20-27). 'Govt./Ins No Effort'=1 if respondent thinks government/insurgents does not do enough to prevent the killing and injuring of civilians; non-response to both questions are parameterized separately (coefficients omitted). All models include survey sample weights. All models include fixed effects for district, SES, ethnicity, gender, and ANQAR survey wave. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table 3: Effects of wartime informing on counterinsurgent operational outcomes

	(1) Roadside Bombs Found/Cleared	(2) Weapon Caches Found/Cleared	(3) Tactical Safe House Raids	(4) Insurgents Captured and Detained
IED TIPS (1 WEEK LAG)	0.0645***	0.0272***		
	(0.0131)	(0.00820)		
ALL TIPS (1 WEEK LAG)			0.0136***	0.00260***
			(0.00300)	(0.000550)
SUMMARY STATISTICS				
Outcome Mean	0.00371	0.00121	0.00123	0.000108
Outcome SD	0.0179	0.00857	0.00622	0.00183
PARAMETERS				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
MODEL STATISTICS				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models are weighted by district population and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

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SUPPORTING INFORMATION

— For Online Publication Only —

Supplemental Figures

Supplemental Tables

A Data

A.1 Conflict Data

The data on insurgent activities, civilian casualties, and information received by ISAF and Afghan forces was received and processed by Authors. The data were declassified and released to them by the U.S. Department of Defense and provide the precise timing and locations (often accurate to the nearest minute and within several meters, respectively) of hundreds of thousands of incidents of insurgent violence throughout the Afghanistan war.

Insurgent Attacks and Civilian Casualties. The dataset is constructed from reports provided by U.S., Afghan, and other ISAF military and police units and includes more than 200,000 observations of attacks perpetrated by insurgents with corresponding details on the weaponry used, as well as whether civilians were (unintentionally) killed or injured in the course of the attack. We use these data as our measure of insurgent violence and civilian casualties in estimated models.

Information Sharing. The dataset also includes tens of thousands of specific incidents of information received by counterinsurgent forces about insurgents. These include specific threats posed by insurgents, frequently identified by the specific attack type (e.g., direct fire, indirect fire, improvised explosive device) as well as reported locations of insurgents. We do not observe the means of collection (in-person, hotline, etc.). Some reports may have been captured via signals, though former ISAF officials indicate these events were unlikely to be released with our records request. If present, however, these records would likely bias our results toward zero.

Counterinsurgent Outcomes. Finally, the dataset includes a variety of details related to operational outcomes, including IEDs found and cleared, weapons caches found and cleared, tactical raids of safe houses, and operations resulting in captured insurgents.

A.2 Survey Data

We use waves 20-27 of the Afghanistan Nationwide Quarterly Assessment Research (ANQAR) platform for models reported in Table 2. The Afghan Center for Socio-Economic and Opinion Research (ACSOR) enumerated these waves of the survey. Using a grid-based random walk method, the firm surveyed ten households from the randomly sampled villages within a district. When ACSOR could not access sampled villages, intercept interviews were used to collect information from residents traveling in neighboring areas.

We analyze responses to three questions in the ANQAR surveys:

1. "If you knew that an IED had been planted, how likely would you be to report it?" Coded 1 if response was 'very likely' and 0 otherwise.

2. "Do you think the Afghan National Defense and Security Forces (ANDSF) do enough to prevent the killing or injuring of civilians?" Coded 1 if the response is "No, I think the ANDSF doesn't do anything" and 0 otherwise.

3. "Do you think the insurgents do enough to prevent the killing or injuring of civilians?" Coded 1 if the response is "No, I think the insurgents don't do anything" and 0 otherwise.

B Descriptive Statistics

Table SI-1: Summary statistics for violence data

Variable	Mean	Std. Dev.	Min.	Max.
All Tips	0.008	0.0284	0	2.6667
Threats to COIN Forces	0.0053	0.0201	0	1.2121
Threats to Civilians	0.0004	0.0029	0	0.5
Tips about Insurgent Activity	0.003	0.0138	0	1.831
IED Tips	0.0022	0.0097	0	0.5389
Roadside Bombs Found/Cleared	0.0037	0.0179	0	1
Weapon Caches Found/Cleared	0.0012	0.0086	0	0.6475
Insurgents Captured and Detained	0.0012	0.0062	0	0.5319
Tactical Safe House Raids	0.0001	0.0018	0	0.2878
Ins. CIVCAS	0.0009	0.0051	0	0.5
Combat activity	0.0158	0.063	0	3.0135

Notes: summary statistics are calculated for the sample studied in the main estimating equations (four digits shown). All variables are standardized by district population (per capita) and weighted by district population (following the main specification).

Table SI-2: Summary statistics for ANQAR survey data

Variable	Mean	Std. Dev.	Min.	Max.
Very likely to report IED	0.442	0.497	0	1
Govt. No Effort to prevent CIVCAS	0.089	0.285	0	1
Ins. No Effort to prevent CIVCAS	0.648	0.478	0	1

Notes: summary statistics are calculated for the sample studied in the main estimating equations (three digits shown). All variables are weighted by district population (following the main specification).

C Supplementary Results

Table SI-3: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces (June-October only)

	(1) All Tips	(2) Threats to COIN Forces	(3) Threats to Civilians	(4) Tips about Insurgent Activity
CIVCAS (1 Week Lag)	0.191***	0.141***	0.00794**	0.0339**
	(0.0553)	(0.0371)	(0.00345)	(0.0143)
Summary Statistics				
Outcome Mean	0.00845	0.00571	0.000384	0.00317
Outcome SD	0.0285	0.0207	0.00292	0.0132
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
Model Statistics				
Number of Observations	89550	89550	89550	89550
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. Estimated only during the short fighting season (June to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-4: Effects of wartime informing on counterinsurgent operational outcomes (June-October only)

	(1) Roadside Bombs Found/Cleared	(2) Weapon Caches Found/Cleared	(3) Insurgents Captured and Detained	(4) Tactical Safe House Raids
IED Tips (1 Week Lag)	0.0632***	0.0197***		
	(0.0162)	(0.00711)		
All Tips (1 Week Lag)			0.0130***	0.00312***
			(0.00360)	(0.000701)
Summary Statistics				
Outcome Mean	0.00395	0.000961	0.00129	0.000114
Outcome SD	0.0178	0.00637	0.00658	0.00209
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
Model Statistics				
Number of Observations	89550	89550	89550	89550
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. Estimated only during the short fighting season (June to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-5: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces (May-October only)

	(1) All Tips	(2) Threats to COIN Forces	(3) Threats to Civilians	(4) Tips about Insurgent Activity
CIVCAS (1 Week Lag)	0.204***	0.141***	0.00651**	0.0527***
	(0.0538)	(0.0366)	(0.00328)	(0.0157)
Summary Statistics				
Outcome Mean	0.00850	0.00576	0.000379	0.00314
Outcome SD	0.0287	0.0210	0.00291	0.0132
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
Model Statistics				
Number of Observations	103878	103878	103878	103878
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. Estimated only during the long fighting season (May to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-6: Effects of wartime informing on counterinsurgent operational outcomes (May-October only)

	(1) Roadside Bombs Found/Cleared	(2) Weapon Caches Found/Cleared	(3) Insurgents Captured and Detained	(4) Tactical Safe House Raids
IED Tips (1 Week Lag)	0.0627***	0.0206***		
	(0.0137)	(0.00717)		
All Tips (1 Week Lag)			0.0121***	0.00289***
			(0.00337)	(0.000719)
Summary Statistics				
Outcome Mean	0.00386	0.00104	0.00125	0.000112
Outcome SD	0.0175	0.00695	0.00645	0.00201
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
Model Statistics				
Number of Observations	103878	103878	103878	103878
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. Estimated only during the long fighting season (May to October). All models are weighted by district population, include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-7: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces, including lags of dependent variable

	(1) All Tips	(2) Threats to COIN Forces	(3) Threats to Civilians	(4) Tips about Insurgent Activity
CIVCAS (1 Week Lag)	0.0237	0.0279*	0.00676**	0.00585
	(0.0225)	(0.0150)	(0.00278)	(0.0101)
Summary Statistics				
Outcome Mean	0.00804	0.00529	0.000374	0.00304
Outcome SD	0.0284	0.0201	0.00289	0.0138
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
Model Statistics				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. All models are weighted by district population, include four lags of the dependent variable, as well as district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-8: Effects of wartime informing on counterinsurgent operational outcomes, including lags of dependent variable

	(1) Roadside Bombs Found/Cleared	(2) Weapon Caches Found/Cleared	(3) Insurgents Captured and Detained	(4) Tactical Safe House Raids
IED Tips (1 Week Lag)	0.0181**	0.00910***		
	(0.00701)	(0.00286)		
All Tips (1 Week Lag)			0.00659***	0.00133***
			(0.00175)	(0.000492)
Summary Statistics				
Outcome Mean	0.00371	0.00121	0.00123	0.000108
Outcome SD	0.0179	0.00857	0.00622	0.00183
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
Model Statistics				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models are weighted by district population, include four lags of the dependent variable, as well as district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-9: Effects of insurgent-initiated civilian casualties on civilians' wartime informing to security forces, unweighted regressions

	(1) All Tips	(2) Threats to COIN Forces	(3) Threats to Civilians	(4) Tips about Insurgent Activity
CIVCAS (1 Week Lag)	0.0445	0.0339	0.00296	-0.00105
	(0.0473)	(0.0257)	(0.00270)	(0.0199)
Summary Statistics				
Outcome Mean	0.00952	0.00621	0.000424	0.00402
Outcome SD	0.0386	0.0267	0.00464	0.0210
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends				
Model Statistics				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is tips on specific threats, as noted in column headings. All models include district and week fixed effects. Models are unweighted. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-10: Effects of wartime informing on counterinsurgent operational outcomes, unweighted regressions

	(1) Roadside Bombs Found/Cleared	(2) Weapon Caches Found/Cleared	(3) Insurgents Captured and Detained	(4) Tactical Safe House Raids
IED Tips (1 Week Lag)	0.0656***	0.0223***		
	(0.0112)	(0.00509)		
All Tips (1 Week Lag)			0.0117***	0.00231***
			(0.00289)	(0.000711)
Summary Statistics				
Outcome Mean	0.00438	0.00138	0.00123	0.000131
Outcome SD	0.0215	0.0106	0.00800	0.00259
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
Model Statistics				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models include district and week fixed effects. Models are unweighted. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table SI-11: Effects of wartime informing on counterinsurgent operational outcomes, comparing tip types

	(1) Roadside Bombs Found/Cleared	(2) Roadside Bombs Found/Cleared	(3) Weapon Caches Found/Cleared	(4) Weapon Caches Found/Cleared
All Tips (1 Week Lag)	0.0161**		0.0117***	
	(0.00678)		(0.00403)	
IED Tips (1 Week Lag)		0.0645***		0.0272***
		(0.0131)		(0.00820)
Summary Statistics				
Outcome Mean	0.00371	0.00371	0.00121	0.00121
Outcome SD	0.0179	0.0179	0.00857	0.00857
Parameters				
District FE	Yes	Yes	Yes	Yes
Time FE	Yes	Yes	Yes	Yes
Violence Trends	Yes	Yes	Yes	Yes
Civ Cas Trends	Yes	Yes	Yes	Yes
Model Statistics				
Number of Observations	171936	171936	171936	171936
Number of Clusters	398	398	398	398

Notes: Outcome of interest is specific counterinsurgent outcomes, as noted in column headings. All models are weighted by district population, and include district and week fixed effects. Standard errors clustered at the district level and are presented in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.