A Strategic Logic of Attacking Aid Workers:
Evidence from Violence in Afghanistan, 2008 – 2012

Neil Narang, Assistant Professor, University of California Santa Barbara
Jessica Stanton, Assistant Professor, University of Pennsylvania

Abstract

Why do armed groups ever direct violent attacks against humanitarian aid organizations? While a growing literature has developed on wartime violence against civilians, little research has been done on violence directed against humanitarian aid organizations. And yet violence against aid workers is common in wartime; furthermore, these attacks have particularly devastating consequences for civilians, who suffer when aid organizations are unable or unwilling to provide services as a result of attacks. This paper argues that much of the violence directed against humanitarian aid organizations is not random, but a strategic response aimed at controlling the civilian population. Aid organizations provide essential supplies and services to civilians, reducing the civilian population's dependence on armed groups for their welfare and, therefore, also reducing the ability of armed groups to control civilians. Armed groups thus target aid organizations as a means of pushing aid organizations out of the region in an effort to retain control over the provision of services and to retain authority over civilians themselves. This paper tests this argument in the case of Afghanistan using an original dataset of all reported attacks against aid workers over the last five years of combat operations in Afghanistan.

1 Author ordering is purely alphabetical.
1. Introduction

In June 2004 in the Badghis province of Afghanistan, Taliban forces ambushed a vehicle bearing the logo of the humanitarian organization, Doctors Without Borders/Médecins Sans Frontiers (MSF), killing five MSF employees, including three foreigners and two Afghans.1 Nothing was stolen from the vehicle. At the time, Badghis did not have a significant United States or international troop presence and according to MSF coordinators, “Badghis was for us considered the safest place to work.”2 The Taliban claimed responsibility for the attack.3

Following the June 2004 attack, MSF suspended all operations in Afghanistan;4 around the same time, the United Nations suspended its activities in Badghis.5 In explaining the withdrawal, the head of the MSF mission noted that, “While the security situation has deteriorated over the last year, what is a new feature is this targeting issue which has never happened before in Afghanistan and this is what makes us take the situation so seriously we felt we have to withdraw.”6

Violent attacks against humanitarian aid workers are common in wartime (Sheik, Gutierrez, Bolton, Spiegel, Thieren, and Burnham 2000; Stoddard, Harmer, and Haver 2006; Stoddard, Harmer, and DiDomenico 2009; Wille and Fast 2013a, 2013b). Afghanistan is no exception, with frequent attacks against aid workers occurring throughout the past decade.7 From 2001 to 2010, Afghanistan was the third largest recipient of humanitarian aid, receiving more than US$5 billion (Global Humanitarian Assistance 2012:30), while total foreign aid, including both humanitarian and development assistance, exceeded US$36 billion.8 For many organizations distributing this aid, the principles of impartiality and neutrality guide their operations, meaning that aid organizations

---

1 Associated Press, 3 June 2004.
2 Agence France-Presse, 3 June 2004.
5 Agence France-Presse, 3 June 2004.
7 Afghanistan ranked third in the number of violent incidents against aid workers from 1997-2005 and second from 2006-2008 (Stoddard, Harmer, and Haver 2006; Stoddard, Harmer, and DiDomenico 2009).
8 Data are from OECD/DAC. Available online at: www.oecd.org
provide assistance based on need alone, without taking sides in the conflict (Anderson 1999). And yet, if aid organizations are providing essential assistance to civilians in need while remaining neutral in the conflict, what explains why armed groups frequently attack them?

These attacks are puzzling because when combatants direct violence against aid workers, aid organizations often decide to suspend their operations, as MSF did in Afghanistan, thereby denying the local civilian population access to aid provisions altogether. The civilians who suffer when aid organizations withdraw are often the very same civilians on whose behalf insurgents claim to fight, and upon whom they depend to supply resources and recruits (Kalyvas 2006). Undermining the provision of aid thus risks undermining the base of civilian support for the insurgency.

One of the most common explanations for why armed groups direct violence against aid workers is that during wartime, the rule of law is weak, allowing individuals to engage in looting and robbery. Aid organizations are particularly tempting targets for attack, as they often disburse significant resources, such as food, medical and communication equipment, and even cash. In their study of worldwide violence against aid workers, Stoddard et al. (2006) note that although some portion of this violence is motivated by a desire to steal resources, in many more cases – like the June 2004 ambush of the MSF vehicle – attacks on aid workers do not involve looting or robbery.

We argue that much of the violence against aid workers during wartime is strategic and politically motivated. Despite attempts by aid organizations to remain neutral and impartial during conflict, their presence can affect the relationships between insurgents, counterinsurgents, and civilians in important ways. The services aid organizations provide are often the very same services that the government is obliged to provide under its social contract with its citizens. By serving as substitute providers of public goods aid organizations can bolster the strength of the government, thereby decreasing the incentives for civilians to support insurgents. With their connection to civilians under threat, insurgents target aid workers as a means of forcing them out of particular
regions in an effort to undermine support for the government. We thus posit that violence against aid workers is likely to be higher in regions where support for the government is higher, as armed groups seek to challenge the government’s control over these regions.

The paper begins with a discussion of the scholarly literature on wartime violence against noncombatants, which has focused primarily on violence against civilians. We argue that simply extending theories of civilian abuse to explain violence against another noncombatant group – in this case, aid workers – is problematic. In the second section, we develop our main argument, positing that armed groups use violence against aid workers as a tool for undermining government control in particular regions. In the second half of the paper, we test this argument statistically using an original dataset describing violence against aid workers in Afghanistan from 2008 to 2012. Looking across provinces in Afghanistan, we find evidence consistent with our argument; attacks against aid workers are systematically higher where support for the government is higher. However, despite our initial expectation that attacks would increase linearly as a function of civilian support for the government, we find evidence of a curvilinear relationship. Attacks against aid workers appear to be concentrated in more marginal provinces where civilian support for the government is neither exceedingly high nor exceedingly low. We also find evidence that the strategic logic of targeting aid workers holds strongly for attacks against international aid workers but not national Afghan aid workers. While initially unexpected, we offer an interpretation of these findings in the results section that is remarkably consistent with the logic of strategic targeting

These findings contribute to an emerging area of research on civil war – examining the impact of humanitarian aid on the dynamics of violence. Several recent studies have convincingly demonstrated that the presence of aid affects insurgent incentives for violence against civilians (Weintraub 2015; Wood and Sullivan 2015). As we show in this paper, however, by altering the relationship between insurgents and civilians, the presence of aid can also lead to increased violence.
against aid workers themselves. While several policy-oriented studies have examined violence against aid workers, only a few rigorous, empirically grounded analyses of the causes of such violence exist. Fast (2014), in her comprehensive qualitative study of attacks against aid workers, and Murdie and Stapley (2014), in their cross-national study of terrorist violence against aid workers, have persuasively demonstrated the ways in which aid can become politicized, creating incentives for violence. Here, we offer an analysis of the strategic incentives for violence using sub-national data on Afghanistan, which allows us to hold constant a variety of factors that otherwise might contribute to violence against aid organizations.

2. Violence against Noncombatants in Civil War

The literature on wartime violence against civilians provides a starting point for understanding violence against aid workers. Civilians, as well as aid workers, are considered noncombatants – individuals who are not actively involved in military operations under international humanitarian law and thus are protected against violence (Henckaerts and Doswald-Beck 2005).

Scholars have made a number of different arguments about when and why armed groups nevertheless engage in violence against noncombatants. One strand of argument emphasizes organizational dynamics, claiming that violence is more likely when armed groups are unable to effectively control their members, leading to looting and opportunistic violence against civilians (Azam 2006; Wood 2006; Weinstein 2007; Hoover Green 2011; Manekin 2013). Some have argued that problems of organizational control are pervasive among armed groups that have access to external resources. These resources attract low-commitment recruits motivated by short-term rewards and who are thus prone to discipline problems, leading to unsanctioned violence (Weinstein 2007).
In Afghanistan, the Taliban does rely on opium production to fund its activities (Maloney 2009, 2010; Thruelsen 2010), and it is possible that this has exacerbated problems of organizational control. However, it is difficult to sustain the claim that this accounts for most violence against aid workers. In fact, the data from Afghanistan show that only about 20 percent of attacks against aid workers involved theft; the vast majority of attacks are designed to deliberately injure or kill aid workers.

A second strand of argument posits that violence against civilians may serve as a strategic means of controlling civilians and thereby territory (Kalyvas 2006). By using violence to punish individuals suspected of aiding the opponent, armed groups can coerce civilians into cooperating and deter other civilians from providing resources and intelligence to the opponent. Some argue that this type of violence is most likely when contestation over territory is high, as belligerents attempt to convince civilians that aiding the other side will be costly (Kalyvas 1999). Others contend that because militarily weak armed groups have difficulty securing voluntary support from civilians, they often resort to coercive violence to obtain resources, leading to increased violence against civilians (Wood 2010, 2014a, 2014b; Wood, Kathman, and Gent 2012).

Extending these arguments to explain violence against aid workers, however, is problematic. As discussed, most aid organizations strive to maintain neutrality and impartiality. And although these principles may sometimes be compromised under challenging wartime circumstances, aid workers are unlikely to be as vulnerable to coercion as civilians. Aid workers often suspend operations in areas of high contestation, insulating them from attempts at coercion.

Other strategic theories posit that governments and rebel groups may attack their opponent’s civilian constituents in an attempt to increase the costs of the conflict, thus pressuring their opponent to make concessions. Some contend that governments and armed groups that are weak militarily (Crenshaw 1998; Pape 2003; Valentino, Huth, and Balch-Lindsay 2004) or groups
that are losing the war (Hultman 2007, 2012; Downes 2008) are more likely to use this strategy. Others argue that armed groups also consider their opponent’s perceived sensitivity to civilian losses (Stanton 2013).

Again, although these arguments help to explain deliberate attacks on an opponent’s civilian constituency, it is unlikely that this logic provides a complete explanation for violence against aid workers. While it is true that many governments benefit from the presence of aid workers as substitute providers of basic services, aid organizations are not political constituents. Because aid workers lack representation in the domestic political process, it is not clear that governments would be nearly as sensitive to attacks on aid workers.

In sum, despite a rich literature on wartime violence against civilians, few studies have attempted to explain violence against other noncombatants, such as aid workers. Media sources, in contrast, have reported extensively on violence against aid workers, and several policy-oriented reports have examined cross-national trends (King 2002; Stoddard et al. 2006, 2009; Wille and Fast 2013a, 2013b). As Fast points out, however, research on this topic has largely taken a descriptive approach, reporting the numbers of deaths rather than evaluating hypotheses regarding the causes of violence (Fast 2010). Meanwhile, the few policy-oriented reports that have suggested possible causes of violence against aid workers (Stoddard et al. 2006, 2009) still lack systematic empirical evidence to support these strategic claims (Fast 2010).

Several scholars, however, have begun to address this gap in the literature. In perhaps the most comprehensive study of violence against aid workers to date, Fast argues that aid organizations often have “internal vulnerabilities” that increase the likelihood of violence; for example, aid organizations may behave in ways that increase perceptions that they are biased toward one side in the conflict (Fast 2014). Fast also acknowledges the importance of the external environment, arguing

---

9 Scholars have examined violence against peacekeepers (Salverda 2013; Fjelde, Hultman, and Lindberg Bromley 2014) but because peacekeepers are armed, they are not considered noncombatants.
that the political context may increase incentives to target aid workers, particularly when aid becomes politicized, as it has in Afghanistan and Iraq. Mitchell provides confirmation of this politicization of aid in Afghanistan, showing that the presence of Provincial Reconstruction Teams (PRTs) – established by international forces to integrate humanitarian assistance with counterinsurgency efforts – was associated with increased violence against NGOs in 2010-2011 (Mitchell 2015). Similarly, Murdie and Stapley (2014) argue that politicization of the NGO sector is likely when human rights NGOs are engaged in political advocacy work. The political message of human rights NGOs may draw support away from insurgents, increasing incentives for insurgents to use terrorist violence against the NGO sector. As we demonstrate in the next section, however, even the presence of avowedly apolitical and neutral humanitarian aid organizations can alter the relationship between insurgents and civilians, creating incentives for violence.

3. A Theory of Violence against Aid Workers

Following the literature on civil wars and counterinsurgency, we begin with the assumption that controlling the civilian population is often a central objective for both insurgent and government forces (e.g., Lawrence 1929; Mao 1961; Kalyvas 2006). Building from this, we argue that the presence of aid organizations can complicate the interaction between the government, insurgents, and civilians. Although aid organizations may try to remain neutral and impartial, the services they provide are oftentimes the very same services that the government would provide under normal circumstances (Stoddard 2003; Macrae and Harmer 2004; Donini 2007; Weintraub 2015; Wood and Sullivan 2015). In relieving some of the pressure on the government to provide public goods, humanitarian and development aid can thus help the government to maintain popular support at the local level. In fact, in some cases, governments may even divert aid towards their own political constituents as a means of maintaining key sources of support (e.g., Harvey and Lind 2005).
Relieved of some of the financial burden of providing public goods, the government may be able to direct scarce resources to counterinsurgency operations and other government programs, thus helping to maintain popular support at the national level as well. Therefore, by decreasing the domestic political costs of sustaining a costly war effort, aid provisions can effectively increase the resolve of the government while decreasing the incentives for civilians to back insurgents.

To be sure, rebel groups also establish governance structures in many conflicts, providing public services in territories they control (Mampilly 2011; Arjona 2014). In these areas, insurgents may also coopt humanitarian assistance to enhance their own governance (Mampilly 2011). When cooptation is possible, insurgents likely have few incentives to undermine the provision of aid. However, in Afghanistan, the Taliban has had difficulty using humanitarian aid to its advantage because – as the Humanitarian Policy Group (HPG) reports – few aid organizations are willing to abide by Taliban regulations (Jackson and Giustozzi 2012).

There is substantial qualitative evidence to support the assumption that humanitarian assistance in Afghanistan benefits the government more so than the insurgency. For example, Terry (2011) observed that, after the Taliban government was overthrown in late 2001, “the overwhelming majority [of aid organizations] embraced a role in ‘post-conflict’ reconstruction and development efforts, and joined the political project to extend the government’s legitimacy throughout the country” (176). In addition, Beath, Christia, and Enikolopov (2011), found that village participation in development assistance programs in Afghanistan is associated with the perception of greater economic well-being and more positive attitudes toward the government. Furthermore, evidence from a recent HPG study examining Taliban perceptions of humanitarian aid indicates that many Taliban members are concerned that humanitarian aid will benefit the government, both by contributing resources to the government and by providing intelligence about insurgent activities (Jackson and Giustozzi 2012). Indeed, the HPG study noted that Taliban members frequently cite
concerns that aid agencies are working on behalf of foreign forces (Terry 2011; Jackson and Giustozzi 2012).

Based on these accounts, it is thus likely that armed groups frequently target aid organizations as a means of pushing them out of particular regions (or out of the country entirely), in an effort to undermine support for the government. Indeed, insurgent groups are well aware that attacks on aid workers may lead aid organizations to withdraw their humanitarian assistance altogether, inflicting severe costs on the civilian population – and, in turn, the government – in the form of lost access to basic services. By strategically directing violence against aid workers in provinces where civilian support for the government is high, armed groups aim to undermine public goods provision and thereby undermine the government’s control over these territories.

At the same time, the withdrawal of humanitarian aid may also bring costs for insurgents. Civilians might blame insurgents for the decline in access to aid, and when aid organizations depart, insurgents have fewer opportunities to siphon off resources. Thus, concentrating attacks in areas of higher government support may also minimize the costs to insurgents, as civilian support for insurgents is already lower in these regions. In regions where civilian support for insurgents is higher, insurgents are less likely to be willing to risk alienating their own supporters by driving away humanitarian assistance. Moreover, where support for insurgents is extremely high, insurgents may even exert significant control over aid activities, further limiting the need to attack aid organizations.

This general logic of violence helps to explain why armed groups have more frequently targeted aid workers in Afghanistan relative to other conflicts. Although many aid organizations have tried to distance themselves from the government’s counterinsurgency operations, maintaining this separation has proven difficult for a number of reasons. First, because the Afghan government is administratively weak (Sullivan 2007; Angstrom 2008; Jones 2008), aid organizations have been forced to fill gaps in government services, which has effectively helped the government remain in
power. Second, many of the aid organizations in Afghanistan, such as MSF and Save the Children, have origins in countries contributing troops to coalition forces defending the government, making it difficult to appear neutral (Donini, Fast, Hansen, Harris, Minear, Mowjee, et al. 2008; Donini 2009, 2010; Stoddard et al. 2009). As a Taliban spokesman noted in 2008, “The UN was established to ensure the rights of nations, but now this organization supports one side in Afghanistan and wants to eliminate the other side” (quoted in Donini et al. 2008:10). Third, the U.S. government has been heavily involved in the provision of aid to Afghanistan, forming an apparent association between the government coalition and aid organizations (Rieff 2002). Indeed, the U.S. has stated that it views the provision of humanitarian aid through PRTs as crucial to the success of rebuilding the Afghan state, with Colin Powell stating publically that “the NGOs are such a force multiplier for us, such an important part of our combat team” (quoted in Rieff 2002:236).

For these reasons, insurgent groups largely perceive aid organizations as bolstering civilian support for the Afghan government, and thereby its overall strength relative to the insurgency. A senior Afghan official described this logic plainly: “aid agencies are being targeted because they deliver services for the government. NGOs increase the legitimacy of the government. The insurgents are not attacking the NGOs, they are attacking the government” (quoted in Donini 2006:31). Interviews with Taliban members, conducted by the HPG, indicate that they also view aid as increasing support for the government. One Taliban commander is quoted as saying “when we became convinced that our support for them [aid agencies] resulted in benefits for the current government and Americans, we started opposing them” (quoted in Jackson and Giustozzi 2012:24). Another Taliban commander offered a similar explanation for opposition to aid organizations, saying, “when our leaders recognized that those [aid] activities were aimed to benefit the

---

10 Whether aid has been effective in winning hearts and minds is debatable (Fishstein and Wilder 2012), but many note that aid organizations in Afghanistan “provide essential services that used to be the prerogative of the state” (Donini 2007:159). See also, Howell and Lind (2009).
government and the foreigners, they issued orders to ban them so we blocked their activities with a single call” (quoted in Jackson and Giustozzi 2012:25).

In line with anecdotal evidence, it is reasonable to hypothesize that armed groups systematically use violence to coerce aid workers into withdrawing or suspending their services as part of a larger strategy to undermine support for the Afghan government. Indeed, this would be consistent with recent studies that have shown insurgent groups can obtain strategic benefits from targeting of noncombatants more generally (Thomas 2014; Wood and Kathman 2014). If this argument is correct, attacks on aid workers should be more likely to occur in areas where civilian support for the government is higher, because it is in these regions that insurgents stand to gain the most. Conversely, we should expect attacks on aid workers to be least likely in areas where civilian support for the government is lowest, because the return on investment from an attack is likely to be comparatively low. Additionally, in areas where government support is already low, attacks will be further suppressed because rebels may directly gain from aid provisions through looting (Wood and Sullivan 2015) or through greater control over distribution (Terry 2002). This is in fact fully consistent with the HPG report, which noted that, in some regions of Afghanistan, the security environment for aid organizations was not as risky because “the Taliban had consolidated control over the villages and were less concerned about aid activities benefitting the Kabul government.”(Jackson and Giustozzi 2012:21)

**Hypothesis: the greater the civilian support for the government in a particular region, the more likely it is that armed opposition groups will attack aid organizations in that region.**

Our argument is similar to previous work by Balcells (2010, 2011), which convincingly links variation in civil war violence to prior electoral support across rival factions. Like Balcells, we posit that civilians’ “public identities” affect the strategic incentives of armed groups to utilize violence across localities. Our theory is also consistent with recent research by Weintraub (2015) and Wood and Sullivan (2015), linking foreign aid to patterns of insurgent violence in civil war. Weintraub
shows that governments’ tendency to provide aid where they have territorial control can incentivize civilians to share information with the government, increasing incumbent territorial control, and thereby forcing insurgents to rely on indiscriminate violence to recapture territory. Here, we highlight the possibility that insurgents may simply target aid organizations to undermine government control. Wood and Sullivan posit that greater inflows of humanitarian aid in conflict zones, by increasing access to lootable resources and threatening rebel authority, can increase incentives for rebel group violence against civilians. We agree that rebel groups often perceive aid as undermining their relationship with civilians, but argue that this may lead not only to increased violence against civilians, but also to increased violence against aid workers. Furthermore, we contend that attacks will vary across space and time within countries, as insurgents direct violence toward areas of greatest support for the government in an effort to deny the government and its supporters access to aid.

The logic of our argument notwithstanding, we acknowledge two potential limitations. First, although we emphasize factors that influence the willingness of insurgents to attack aid workers, many scholars have argued that the opportunity to commit violence is also important. For example, insurgents may be more likely to attack aid caravans when they are not well defended or in the more permissive summer months (Fast 2014), or where more developed infrastructure gives humanitarian organizations better access to victims. We recognize these risk factors as important, and below, we attempt to control for several “opportunity” factors that might confound the hypothesized relationship between support for the government and attacks against aid workers.

Second, we argue that insurgents deliberately attack aid workers in areas of high government support to reduce access to aid in these areas, thus harming the government and its constituents. It is possible, however, that insurgents are simultaneously motivated to attack aid workers for informational reasons similar to those influencing attacks against civilians (Kalyvas 2006). If aid is
more likely to flow to areas where the government exerts greater control, attacks against aid workers may be more likely simply because rebels know less about activities in these areas, and have difficulty identifying which aid organizations are most closely allied to the government. While it is possible that this alternative mechanism is occurring alongside our hypothesized mechanism, the first-hand accounts of combatants and agencies on the ground quoted above provide evidence that attacks are orchestrated when and where aid workers are perceived to increase support for the government.

4. Research Design

In this section, we examine the empirical relationship between civilian support for the government and attacks against aid workers across province-year observations in Afghanistan.

4.1 Data

For data on our dependent variable – the average monthly number of attacks against aid workers – we compiled an original dataset based on newly released statistics from the Afghan National Security Office (ANSO) and maintained by the International NGO Safety Organization (INSO).11 INSO works on the ground alongside aid organizations throughout Afghanistan to provide information on incidents in which armed groups have attacked NGOs. Using bi-monthly ANSO Province reports, we created a new event-level dataset recording over a dozen characteristics of every violent incident in which armed groups targeted aid workers across all 34 provinces in Afghanistan from April 2008 through December 2012, the period for which INSO reports are available. However, because many of the covariates described below are recorded at the province-year level, we aggregated these event data into a single province-year indicator. Furthermore, given that the total number of attacks for some province-years are summed across less than 12 months (8 months in 2008, 12 months in 2009,

11 It is possible to analyze other dependent variables, including the proportion of total violence that is attacks against aid workers. However, because our theory makes no predictions about the percentage of violence that insurgents will allocate towards aid workers, we leave this to future studies.
2010, and 2011), we divided the total number of attacks by the number of months in that year to calculate the average number of attacks per month in each province-year under observation as our dependent variable.

In total, the dataset contains information on 691 unique attacks against aid workers resulting in roughly 936 victims (often, several aid workers are affected in a single attack). Although some of these victims were neither injured nor killed, many were: 119 victims were killed, 148 were injured but not killed, and 475 were kidnapped and eventually released. While kidnappings represent the largest number of victims by category, they are relatively uncommon events with respect to the total number of attacks. Indeed, 513 (74%) of the attacks did not involve an abduction.

For each attack, we record (i) the date; (ii) the physical location at the province-level and the district-level when available; (iii) the type of NGO targeted, including its mission (demining, education, healthcare, etc.) and whether it was a national or international NGO; (iv) the affiliation of the perpetrators (Taliban, international military forces, unspecified armed opposition group, etc.); (v) the tactic used (Gunfire/Small Arms Fire, RPG, Missile/Mortar, Explosives, Robbery, Arson, Threats, Suicide Attack, Search, Abduction); and finally (vi) the object targeted (Office/Compound, Vehicle Convoy, Person).

Due to the limited temporal coverage of the covariates described below, we analyze the earlier period of this dataset from April 2008 to December 2011. In this period we observe a population of 1530 province-months (34 provinces from April 2008 - December 2011), within which there were 586 documented attacks that occurred in 394 province-months and resulted in 817 total victims (110 killed, 108 injured, 445 abducted). Figure 1 illustrates the temporal variation in these data by plotting the number of attacks against aid workers and the number of fatalities over time summed across all 34 provinces in Afghanistan. Attacks against aid workers follow a similar

12 A separate global dataset on aid worker attacks – the Aid Worker Security Database (AWSD) – does not have the same level of precision for Afghanistan as ANSO reports (Stoddard et al., 2006).
pattern as overall violence in Afghanistan, with attacks varying seasonally and peaking during the summer fighting season.\textsuperscript{13}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{image1.png}
\caption{Total Number of Attacks against Aid Workers (Solid) and Total Number of Victims (Dot) in Afghanistan over Time (months), April 2008 – December 2011}
\end{figure}

\textbf{Figure 2} illustrates the cross-sectional variation in the data, with darker shades indicating provinces with greater numbers of total attacks from April 2008 to December 2011. The most violent province was Herat with 53 total attacks, followed by Nangarhar with 46. The least violent

\textsuperscript{13} We found no evidence that the spike in victims in July 2011 was part of a broader strategic shift. The spike results from 2 outlier attacks out of 24 that month. The first involved the abduction of 31 aid workers from a demining organization in Farah, while the second generated 40 victims of a non-medical organization in Ghazni. These two separate events alone account for 8\% of the attacks in July, but 80\% of the victims.
province was Urzugan with only one documented attack against an aid worker over the full 45 months.

Figure 2: Map of Total Number of *Attacks* against Aid Workers across 34 Provinces of Afghanistan, 2008 – 2011

For data on our main explanatory variable, *civilian support for the government*, we use multiple sources, beginning with the Afghanistan Election Data collected by the National Democratic Institute (NDI).\(^\text{14}\) Since district-level election data is unavailable prior to 2009, we use the percentage of votes cast for the incumbent presidential candidate, Hamid Karzai, during the October 9, 2004 and August 20, 2009 presidential elections in Afghanistan as a proxy-measure for the overall level of support for the government among the civilian population in that province.\(^\text{15}\) We use Karzai’s vote share in the 2004 presidential elections to measure support for the government in each province in 2008 and 2009 and we use Karzai’s vote share in the 2009 presidential elections to measure support

---

\(^{14}\) Data available online at http://afghanistanelectiondata.org/

\(^{15}\) Schutte (2014) measures civilian loyalty toward ISAF using data on incidents in which civilians provided international forces with the location of IEDs. Testing our argument, however, requires a measure of support for the government, and attitudes toward ISAF may differ from attitudes toward the government.
for the government in each province in 2010 and 2011.\textsuperscript{16} Thus, while much of the variation in the measure is cross-sectional, the over-time variation across the two time points allows us to estimate an average difference across provinces and account for some of the temporal variation in the dependent variable. Appendix Figure A1 provides a map plotting the distribution of our key explanatory variable. Below, we discuss some limitations of these data and propose several solutions.

NDI estimated that more than 75 percent of registered voters cast ballots in the 2004 presidential race (NDI 2010:72). Hamid Karzai, who had been serving as Afghanistan's president since the overthrow of the Taliban in 2001, received 55.4 percent of the vote nationally. Yonous Qanooni received 16.3 percent of the vote, with Haji Mohammad Mohaqiq and Abdul Rashid Dostum each receiving about 10 percent. Although some voting irregularities were reported – mainly regarding problems with the indelible ink – the elections were judged to be free and fair (NDI 2010; Weidmann and Callen 2013).

Electoral support for Karzai varied significantly across provinces, with the highest levels of support recorded in the south, southeast, and east of Afghanistan, where Karzai received more than 80 percent of the vote share in a number of provinces. Electoral support for Karzai was significantly lower in the central and northern regions of Afghanistan; in these regions, each of the main opposition candidates won at least two provinces.

The 2009 presidential elections were marked by significantly lower turnout than 2004, as well as increased reports of election fraud (NDI 2010; Weidmann and Callen 2013). The body responsible for administering the elections, the Independent Election Commission (IEC), released preliminary results on September 16, 2009; but following investigations of fraud allegations, the IEC released revised results on October 19. In the initial tally, Karzai received 54.6 percent of the vote,

\textsuperscript{16} Our results are robust to an alternative measure that uses the 2004 election results for 2008 only, and the 2009 results for 2009, 2010, and 2011 (Appendix Table A3).
followed by Abdullah Abdullah with 27.8 percent; the revised results gave Karzai 49.7 percent of the vote and Abdullah 30.6 percent (NDIi 2010:44, 47–48).

As in the 2004 elections, the extent of electoral support for Karzai varied in 2009. Karzai again swept districts in the south, southeast and east of Afghanistan and also made significant inroads into the north. However, Abdullah Abdullah won several rural districts in the West; while the third place candidate, Ramazan Bashardost, received strong support in central Afghanistan.

For the most part, the revised October 19 election results did not alter outcomes at the provincial level. Nevertheless, we take allegations of fraud seriously, as it could threaten the validity of Karzai vote share as a reliable measure of government support. We thus run our analyses using both sets of results – the preliminary results released on September 16 (Table 2) and the final results released on October 19 (Appendix Table A4) – and our findings remain consistent. We also run robustness checks in which we drop the provinces alleged to have the greatest incidence of fraud, according to data from Weidmann and Callen (2013). Weidmann and Callen find that in 14 of the 389 districts (3.6 percent), fraud benefited both candidates, while in 58 districts (14.9 percent) fraud benefited Karzai, and in 66 districts (17.0 percent) fraud benefited Abdullah. These problematic districts are spread throughout Afghanistan, with the majority of provinces having at least one district showing evidence of fraud. For this reason, we do not find irregularities at the district level to have a significant impact on our province-level measure. However, in three provinces – Kandahar, Paktika and Nangarhar – the majority of districts have indications of electoral fraud in favor of Karzai. To address this, we run robustness tests in which we drop these three provinces from the analysis; doing so does not significantly alter our results (Appendix Table A5).

Variation in electoral support for Karzai is not a perfect measure of the level of support for the government. However, at present, no preferable alternatives exit. One limitation of the measure is the time-gap between our measurement of the treatment (civilian support) and the outcome
(attacks). A second limitation is that it may also track the level of government control across provinces, which is perhaps a separate mechanism from support for the government. Finally, we acknowledge that a vote for a competitor to Karzai does not necessarily mean that the civilian population in that province supported armed opposition groups. However, we believe that it is reasonable to assume that the provinces in which a higher percentage of the population voted for Karzai generally exhibit higher levels of support for the government compared to provinces in which Karzai’s vote share was considerably lower. As Steele (2011) argues with regard to Colombia, election results can provide a means for armed groups to obtain information on civilian loyalties, and to link this information to particular geographic locations. Indeed, in Afghanistan, the Joint Electoral Management Body (JEMB), which oversaw the 2004 presidential elections, and the Independent Election Commission (IEC), which oversaw the 2009 presidential elections, publicized the election results broken down by province. Similar to Steele’s findings for Colombia, Hirose, Imai, and Lyall (2014) provide powerful evidence that civilian attitudes are a strong predictor of violence in Afghanistan, acting as “cues” for insurgents that facilitate their decision-making about where and how to stage attacks. And although Blair, Imai, and Lyall (2013, 2014) have argued that civilian attitudes in Afghanistan ought to be measured at the more micro-level (village or individual), publicly disseminated information on civilian attitudes is often aggregated up to the level of the province. This should, in turn, lead to distinct patterns in violence across provinces. Therefore, we expect that as the percentage of the vote share for Karzai increases across provinces, the more likely armed groups will be to use violence to coerce aid workers into withdrawing.

These points notwithstanding, to probe the validity of Karzai Vote Share as a measure of support for the government, in the results section we examine alternative measures, including the percentage of the population that turned out to vote in the election, and survey data from the Asia

---

17 Nordland (2010) quotes Oxfam explaining how attacks influenced the decision to operate in only 26 provinces.
Foundation based on public opinion polls of roughly 6,300 Afghan citizens across the 34 provinces taken annually from 2004-2012.

4.2 Control Variables

In the analysis below, we use a combination of control variables, described in Appendix Table A1, to account for the fact that our independent variables may not be ‘randomly assigned’ across Afghan provinces. For example, it is possible that overall levels of violence are simply higher in provinces in which the government enjoys greater civilian support, in which case, aid workers may be incidentally caught in the cross-fire more often, rather than deliberately targeted as our strategic logic implies. Similarly, provinces in which support for the government is high may also be provinces in which aid workers are granted greater access to civilians (suggesting a higher propensity to be treated), in which case any increased risk of an attack against aid workers may be an artifact of a greater absolute number of aid workers on the ground rather than the strategic incentives we posit. One way to limit the risk of endogenous selection would be to run a two-stage model to recover some exogenous component of government support; however, this is difficult to implement given our small sample size. Instead, we include factors that may increase the overall likelihood of an aid worker attack as controls.

First, we included a measure for the Overall Level of Violence using the Worldwide Incidents Tracking System (WITS), the U.S. government’s statistical database on acts of terrorism and political violence.\textsuperscript{18} We constructed this measure by aggregating violent events from WITS into two separate indicators: one that sums all violent events, and another that excludes attacks against aid workers.\textsuperscript{19}

\textsuperscript{18} While it would be ideal to control for violence against civilians, province-level data on this are not available for the time period we examine. ACLED identifies incidents of “violence against civilians” at the province level, but attacks against aid workers are included in this category. As Hirose, Imai, and Lyall (2014) note, the data from iMMAP are noisy and suffer from a clear under-reporting problem, yielding far fewer recorded instances of violence than other sources.

\textsuperscript{19} The results are robust to both measures.
WITS provides information on the location of each incident, allowing for the creation of a province-level measure of violence.

As a robustness check, we also utilized three alternative measurements for the overall intensity of violence in Afghanistan from the Armed Conflict Location Event Data (ACLED), the Joint Operations—INTEL Information System (JOIIS) database, and the Combined Information Data Network Exchange (CIDNE) database (Berman, Callen, Felter, and Shapiro 2011). In all cases we aggregate to the province-year level to match voting data. In the main tables, we report results using the WITS measurement of overall violence, because it is available for the full time period of our data set. The ACLED, JOIIS, and CIDNE data are only available for 2008 and 2009; but the main findings do not change if we use these data sources and estimate the model for 2008 and 2009 (Appendix Tables A6, A7, and A8, respectively). This is because the three measures of violence are highly correlated over the observations for which we have data, as shown in Appendix Table A2. In Appendix Table A9 we also control for violence against ISAF troops. This analysis also provides evidence that the relationship between support for the government and attacks is not purely driven by antagonism towards the “Western” nature of aid organizations or the U.S. and its allies.

Second, we use several different means of controlling for the number of aid workers present in each province, to address the possibility that insurgents may have greater opportunity to attack aid workers in provinces with a greater aid worker presence. An ideal way to address this concern would be to measure our dependent variable as the per-capita rate of aid worker attacks. Unfortunately, it is not possible to directly measure the number of aid workers on the ground in a particular province-year (Benelli, Donini, and Niland 2012). However, in the absence of these data, we control for the amount of Total Food Aid disbursed in a province-year (measured continuously in metric tons) as a proxy for the total number aid workers present to distribute provisions. In 2012-2013, Afghanistan’s Central Statistics Office began collecting data on the number of NGOs present in each province, in
addition to the data it had been collecting for several years on food aid disbursed. These two measures – the number of active NGOs and the total food aid disbursed – are highly correlated for 2012-2013, suggesting that the measure of Total Food Aid can proxy for the presence of aid workers. In a separate set of analyses, we use two alternate means of controlling for the presence of aid workers: Development Project Number captures the number of NGO development projects active in each province in each year, while Development Expenditure measures total annual expenditure on NGO development projects in the province.

Third, we include a measure for the Total Population in a province-year. Aid organizations may be more inclined to treat more populated provinces for reasons of impact and efficiency. At the same time, more populated provinces tend to support the incumbent Karzai government.

Fourth, previous research has posited a relationship between the availability of lootable resources and the likelihood of violence against non-combatants. To control for the Presence of Drugs or other criminal activity, we include a measure of the amount of land used for opium cultivation in each province, using data from the United Nations Office on Drugs and Crime (UNODC) and the Afghanistan Ministry of Counter Narcotics.

Finally, some have argued that factors internal to aid organizations may influence the likelihood of violence (Fast 2014); and anecdotal evidence from Afghanistan suggests that the Taliban, at times, may differentiate between aid organizations (Jackson and Giustozzi 2012). While quantitative measures of internal organizational characteristics are not available, our data allow for differentiation between attacks on International aid organizations and National aid organizations.

---

20 The correlation coefficient for province is 0.8227 (p=0.0000). Because nearly all NGOs have a presence in the capital city, we drop Kabul in calculating the correlation.
21 Data are from the Afghanistan Central Statistics Organization, Statistical Yearbooks, available online at: cso.gov.af.
22 Data are from the Afghanistan Central Statistics Organization, Statistical Yearbooks.
which are organizations based locally in Afghanistan.\textsuperscript{24} Evidence suggests that this distinction is relevant to Taliban commanders, who have indicated a greater willingness to trust Afghan NGOs compared to international NGOs (Jackson and Giustozzi 2012).

5. Results

Table 1 reports the regression results for our central hypothesis using an OLS regression with fixed effects by province to control for heterogeneity in unobserved characteristics that may influence the predictor variables.\textsuperscript{25} This is important because our relatively simple model specifications almost certainly exclude latent variation across provinces that could bias our estimates. In particular, it is possible that attacks against aid workers are a function of the local security environment, whereby aid workers can only enter the most permissive provinces (which may be controlled by the Karzai government), and thus they are simply attacked in the provinces where they are located. We find little evidence for this form of selection bias: the correlation coefficient between the intensity of violence and the presence of aid workers is not statistically significant. Nevertheless, the estimates below measure the impact of each variable within each province over time and average those coefficients across each of the 34 provinces in case there are time-invariant characteristics (e.g., terrain) that affect access across provinces.\textsuperscript{26} In addition, given limited temporal variation in the available electoral data, and given that fixed effects can suppress some of the cross-sectional variation, we also analyze the data using a negative binomial model and a Poisson model without fixed effects. However, because our dependent variable measures the average monthly number of attacks in each province-year, rather than the total number of attacks, count models are unlikely to be the best fit for the data structure; nevertheless, our results are robust to these models.

\textsuperscript{24} Sheik et al. (2000) report that aid organizations usually employ a ratio of foreign to local staff of 7:1 or 8:1.

\textsuperscript{25} To confirm that the time-invariant characteristics are unique to the individual province, and not correlated with the error term and constant of other provinces, we ran a Hausman test to reject the null hypothesis that the preferred model is random effects (Greene 2008:chapter 9).

\textsuperscript{26} We also control for the level of violence across provinces.
Table 1: Level of Government Support (Karzai Vote Share) and the Average Monthly Number of Aid Worker Attacks per year across 34 Afghan Provinces, April 2008-December 2011

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Model 1 (OLS)</th>
<th>Model 2 (OLS)</th>
<th>Model 3 (OLS)</th>
<th>Model 4 (OLS)</th>
<th>Model 5 (OLS)</th>
<th>Model 6 (OLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number Aid Worker Attacks Fixed</td>
<td>Avg. Number</td>
<td>Overall Level of Violence</td>
<td>0.00314***</td>
<td>0.00270***</td>
<td>0.00269***</td>
<td>0.00274***</td>
</tr>
<tr>
<td>Effects</td>
<td>Number Aid</td>
<td></td>
<td>(0.000888)</td>
<td>(0.000880)</td>
<td>(0.000890)</td>
<td>(0.000790)</td>
</tr>
<tr>
<td>Worker Attacks Fixed Effects</td>
<td>Attacks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Karzai Vote Share</td>
<td>0.599***</td>
<td>0.496**</td>
<td>0.478**</td>
<td>0.523**</td>
<td>0.451**</td>
<td>0.386*</td>
</tr>
<tr>
<td></td>
<td>(0.225)</td>
<td>(0.227)</td>
<td>(0.234)</td>
<td>(0.200)</td>
<td>(0.204)</td>
<td>(0.207)</td>
</tr>
<tr>
<td>Population Size (Logged)</td>
<td>-2.481*</td>
<td>-3.417*</td>
<td>-1.603</td>
<td>-2.702**</td>
<td>-2.637*</td>
<td>-1.938</td>
</tr>
<tr>
<td></td>
<td>(1.394)</td>
<td>(1.729)</td>
<td>(1.350)</td>
<td>(1.240)</td>
<td>(1.558)</td>
<td>(1.192)</td>
</tr>
<tr>
<td>Opium Cultivation</td>
<td>18.33</td>
<td>22.26</td>
<td>30.59</td>
<td>11.58</td>
<td>18.85</td>
<td>23.03</td>
</tr>
<tr>
<td></td>
<td>(28.97)</td>
<td>(29.08)</td>
<td>(29.01)</td>
<td>(25.77)</td>
<td>(26.20)</td>
<td>(25.63)</td>
</tr>
<tr>
<td>Total Food Aid</td>
<td>-0.0769**</td>
<td></td>
<td></td>
<td>-0.0700**</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(0.0351)</td>
<td></td>
<td></td>
<td>(0.0312)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development Project Number</td>
<td></td>
<td>0.00247*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.00143)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development Expenditure</td>
<td></td>
<td></td>
<td>8.78e-06</td>
<td></td>
<td></td>
<td>1.17e-05</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(8.01e-06)</td>
<td></td>
<td></td>
<td>(7.08e-06)</td>
</tr>
<tr>
<td>Constant</td>
<td>16.15*</td>
<td>21.41*</td>
<td>9.978</td>
<td>17.49**</td>
<td>16.51*</td>
<td>12.08</td>
</tr>
<tr>
<td></td>
<td>(8.864)</td>
<td>(10.88)</td>
<td>(8.493)</td>
<td>(7.884)</td>
<td>(9.798)</td>
<td>(7.504)</td>
</tr>
<tr>
<td>Observations</td>
<td>136</td>
<td>136</td>
<td>136</td>
<td>136</td>
<td>136</td>
<td>136</td>
</tr>
<tr>
<td>Provinces</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.187</td>
<td>0.172</td>
<td>0.157</td>
<td>0.176</td>
<td>0.139</td>
<td>0.157</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
We display the results for six different models, each of which estimates the relationship between the average number of aid worker attacks per month and the level of civilian support for the government across province-years. Model 1 reports the results of our baseline model, which controls for the number of aid workers present using the amount of food aid disbursed. Consistent with our hypothesis, the average monthly number of attacks is significantly higher in province-years in which support for the incumbent Karzai government is highest. The coefficient on Karzai vote share is positive and statistically significant (p=0.009). In other words, aid workers appear to be more vulnerable to attacks in areas where civilian support for the government is highest. The results of Models 2 and 3 demonstrate that the relationship is robust to two alternative measures that proxy for the total number of aid workers: the total number of development projects and the size of those projects. In both cases, greater support for the incumbent Karzai government is associated with a higher number of attacks. Models 4-6 mirror Models 1-3 exactly, except we drop attacks against aid workers that involved looting or robbery to show that the results are not confounded by criminal motivations. The results are also robust to controlling for alternative measures of overall violence, including the WITS indicator that excludes attacks against aid workers. Despite aid organizations’ commitment to remain impartial and neutral, the findings provide strong evidence of a political logic for violence against aid workers.

To provide a substantive interpretation of the regression results, Figure 3 uses Clarify (King, Tomz, and Wittenberg 2000) to plot the simulated average number of attacks per month moving from the lowest percentile of Karzai vote share on the left to the top percentile of Karzai vote share on the right at discreet quantities of interest holding all other covariates at their mean. Over this full range, the simulated average number of attacks per month increases roughly 75 percent when moving from one percent support for Karzai to 99-percent support (0.282 to 0.492 attacks per month on average). Or, more conventionally, the estimated average number of attacks per month
increases roughly 35.4 percent when moving from 1-standard deviation below the mean to one 1-standard deviation above the mean of Karzai Vote Share. Because the simulated confidence intervals appear to overlap, we confirmed that the difference in means between higher and lower values is significant by calculating the t-statistic and verifying that it is above the critical 1.96 value (e.g. \( t=2.30 \) comparing 1-percent to 99-percent).

**Figure 3: Substantive Effect of Karzai Vote Share on the Average Monthly Number of Attacks against Aid Workers**

![Graph showing the substantive effect of Karzai Vote Share on the average monthly number of attacks against aid workers.](image)

Interestingly, the simulated results in Figure 3 suggest that while the predicted number of attacks increases monotonically across the full range of Karzai Vote Share, a nonlinear phase transition may exist at the highest levels of support for the government. We investigated this formally by including polynomials and found some evidence of a curvilinear relationship wherein the effect of Karzai Vote Share–squared is negative, suggesting that, after some point, increasing support for the government is negatively related to attacks. To approximate this point, we estimated the relationship between attacks and Karzai Vote Share in quintile intervals, and found that the positive relationship is concentrated between 20-percent and 80-percent of Karzai Vote Share, with a negative relationship emerging after 80-percent. This indicates that although popular support for the
government is associated with a higher likelihood of attacks against aid workers, insurgents may have greater incentives to concentrate attacks in more marginal provinces, where undermining support for the government could “swing” a province in insurgents’ favor. An alternative interpretation of these results might be that government control simply precludes insurgents from operating in areas where support is particularly high. However, we find little support for this alternative interpretation, as attacks are frequent even in province-years in the top quintile of government support, with 146 attacks occurring in these years, at an average monthly rate of 0.30 per province (population average is 0.38).

This non-linear relationship – intuitive as it is – was not our original theoretical expectation. Nevertheless, the finding makes sense, and it perhaps should have been our theoretical prior from the outset. Indeed, if insurgents are rational, then it would seem that the greatest potential return on investment should come from targeting provinces where civilian support for the government is neither exceedingly high nor exceedingly low. Similar to campaigning in domestic political elections, marginal provinces should be more “ripe” to swing in the opposition’s favor per unit of effort. In provinces with very high levels of support for Karzai, it would take a prohibitively large campaign of violence to undermine the government; while in provinces with extremely low levels of support for Karzai, insurgents may be able to coopt aid organizations, reducing the need for violence.

Remarkably, insurgents appear to concentrate attacks at the optimal point in the cost-curve.

With respect to the control variables in the main analysis, perhaps unsurprisingly, the rate of attacks against aid workers is positively correlated with both the overall intensity of violence (Narang 2012) and with the overall size of the aid effort on the ground. Finally, aid workers appear to be more vulnerable to attacks in highly populated provinces, perhaps because they represent more pivotal pieces in the competition between armed groups and the state.
We also run a series of additional tests to probe the robustness of the results. Appendix Tables A10 and A11 show that the results are robust when using a simple negative binomial model and a Poisson model. In Appendix Table A12, we address the possibility that support for the government may be partly endogenous to attacks against aid workers by utilizing a two-stage residual inclusion (2SRI) method as described by Terza et al. (2008) and implemented by Findley & Young (2011) and Azam & Delacroix (2006). We find that the coefficient estimate for our main independent variable remains the same.

In Appendix Table A13, we show that the results are robust to an alternative measure of support for the government: the percent of the population that voted in the 2004 and 2009 presidential elections. To the degree that this indicator of turnout captures support for the state – regardless of which candidate wins – we find very similar results. In Appendix Table A14, we show that the results are robust to the inclusion of factors that proxy for the opportunity to attack aid workers, including Road Coverage and Bridges, which together affect access across provinces. While it is still possible that the opportunity to attack is correlated with the willingness to attack aid workers, the virtually unchanged coefficient for support for the Karzai government suggests that at least some portion of this “willingness” is orthogonal to the opportunity to attack, and can thus be estimated as an independent risk factor. In Appendix Table A15, we show that the results are robust to the inclusion of controls for foreign military presence – proxied by the location of ISAF military installments across provinces over time – which previous studies have shown to be correlated with suicide violence (Pape 2003), and may also be correlated with the activities of aid workers. Finally, Appendix Table A16 shows that the results are robust to the inclusion of controls for the ethnic composition of provinces over time – proxied by the percentage Pashtun – since previous work has found political violence in Afghanistan to be concentrated in majority Pashtun areas (Berman, et al.
The results suggest that the relationship between support for the government and attacks against aid workers is not entirely driven by the ethnic differences underlying the broader conflict.

Table 2 investigates whether the same logic applies to attacks against National (Models 1-3) versus International aid organizations (Models 4-6). According to our data, 400 incidents involved attacks against national organizations, while 274 incidents involved attacks against international organizations. Interestingly, we find that while support for the government is associated with a greater likelihood of attacks against international aid organizations, it is not strongly associated with the likelihood of attacks against Afghan aid organizations. Although we initially held no prior expectations for a heterogeneous treatment effects across the two groups, this finding is consistent with the logic of our theoretical argument. We posited that armed groups attack aid organizations in an effort to push them out of regions where support for the government is high. International aid organizations can, and often do, pull out of dangerous areas or even suspend operations in a particular country, as MSF did in Afghanistan. Afghan organizations, however, do not have the same options to withdraw from the country. The fact that support for the government influences attacks against international but not national aid workers suggests that combatants only expect attacks against the former to reduce the provision of services, thus undermining support for the government.

In theory, one might suppose that national organizations could relocate their operations to other provinces in Afghanistan. However, most Afghan aid organizations do not have national reach, as their small staff and lack of resources generally limit their operations. Indeed, a 2012 report detailing the operations and geographic coverage of all registered Afghan NGOs showed that only

---

27 National and International aid worker attacks are positively correlated (p<0.05) across provinces (0.78) and time (0.43).

28 In addition, the higher absolute number of attacks against national aid workers suggests that attacks are not simply driven by a desire to force “international interveners” to leave. If this were true, insurgents would have little incentive to attack national aid workers at all, let alone at a higher rate.
6.5 percent of the 306 active Afghan NGOs operate in more than five provinces; while more than 40 percent operate in only one province or city (Counterpart International 2012). As such, Afghan aid organizations are typically attached to the localities in which operate.
Table 2: Comparing the Rate of Average Monthly Number of Aid Worker Attacks per year against National versus International Aid Workers as a function of Government Support (Karzai Vote Share) across 34 Afghan Provinces, April 2008-December 2011

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Model 1 (OLS)</th>
<th>Model 2 (OLS)</th>
<th>Model 3 (OLS)</th>
<th>Model 4 (OLS)</th>
<th>Model 5 (OLS)</th>
<th>Model 6 (OLS)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Aid</td>
<td>Number Aid</td>
<td>Number Aid</td>
<td>Number Aid</td>
<td>Number Aid</td>
<td>Number Aid</td>
</tr>
<tr>
<td>Worker Attacks National</td>
<td>Fixed Effects</td>
<td>Fixed Effects</td>
<td>Fixed Effects</td>
<td>Fixed Effects</td>
<td>Fixed Effects</td>
<td>Fixed Effects</td>
</tr>
<tr>
<td>Karzai Vote Share</td>
<td>0.00136</td>
<td>-0.0111</td>
<td>-0.00790</td>
<td>0.269**</td>
<td>0.237**</td>
<td>0.190*</td>
</tr>
<tr>
<td>(0.109)</td>
<td>(0.109)</td>
<td>(0.112)</td>
<td>(0.103)</td>
<td>(0.100)</td>
<td>(0.101)</td>
<td></td>
</tr>
<tr>
<td>Overall Level of Violence</td>
<td>0.000486</td>
<td>0.000400</td>
<td>0.000403</td>
<td>0.000844**</td>
<td>0.000773**</td>
<td>0.000729*</td>
</tr>
<tr>
<td>(0.000429)</td>
<td>(0.000424)</td>
<td>(0.000424)</td>
<td>(0.000407)</td>
<td>(0.000389)</td>
<td>(0.000383)</td>
<td></td>
</tr>
<tr>
<td>Population Size (Logged)</td>
<td>1.056</td>
<td>1.330</td>
<td>1.285**</td>
<td>-1.726***</td>
<td>-2.772***</td>
<td>-1.728***</td>
</tr>
<tr>
<td>(0.673)</td>
<td>(0.832)</td>
<td>(0.643)</td>
<td>(0.638)</td>
<td>(0.764)</td>
<td>(0.581)</td>
<td></td>
</tr>
<tr>
<td>Opium Cultivation</td>
<td>34.15**</td>
<td>37.05***</td>
<td>36.80***</td>
<td>-12.48</td>
<td>-15.95</td>
<td>-10.54</td>
</tr>
<tr>
<td>Total Food Aid</td>
<td>-0.0179</td>
<td>-6.68e-05</td>
<td>-6.14e-07</td>
<td>-6.441</td>
<td>0.00148**</td>
<td>1.04e-05***</td>
</tr>
<tr>
<td>(0.0169)</td>
<td>(0.000689)</td>
<td>(3.82e-06)</td>
<td>(4.279)</td>
<td>(5.323)</td>
<td>(4.056)</td>
<td>(3.45e-06)</td>
</tr>
<tr>
<td>Development Project Number</td>
<td></td>
<td>-6.14e-07</td>
<td>-6.441</td>
<td>10.92***</td>
<td>17.43***</td>
<td>10.84***</td>
</tr>
<tr>
<td>(0.000633)</td>
<td></td>
<td>(3.82e-06)</td>
<td>(4.279)</td>
<td>(4.056)</td>
<td>(4.803)</td>
<td>(3.654)</td>
</tr>
<tr>
<td>Development Expenditure</td>
<td></td>
<td>-6.441</td>
<td>-8.310</td>
<td>-8.021*</td>
<td>10.92***</td>
<td>17.43***</td>
</tr>
<tr>
<td>(3.45e-06)</td>
<td></td>
<td>(5.323)</td>
<td>(4.049)</td>
<td>(4.056)</td>
<td>(4.803)</td>
<td>(3.654)</td>
</tr>
<tr>
<td>Constant</td>
<td>-6.441</td>
<td>-8.310</td>
<td>-8.021*</td>
<td>10.92***</td>
<td>17.43***</td>
<td>10.84***</td>
</tr>
<tr>
<td>Observations</td>
<td>136</td>
<td>136</td>
<td>136</td>
<td>136</td>
<td>136</td>
<td>136</td>
</tr>
<tr>
<td>Provinces</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
<td>34</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.152</td>
<td>0.143</td>
<td>0.143</td>
<td>0.122</td>
<td>0.167</td>
<td>0.195</td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
We also investigated whether certain kinds of NGO projects are more likely to be targeted. Information is limited on NGO activities; INSO only identified the NGO’s primary mission in about one-third of the attacks. Nevertheless, these data appear to support our causal story: in incidents where the NGO mission was identifiable, more than 70-percent of attacks involved NGOs providing basic services, such as medical care, development assistance, or education.

Finally, one important concern with these results is that in calculating the level of support for Karzai by extrapolating from the 2004 and the 2009 electoral returns, our main independent variable does not vary over every year in our panel. In addition to presenting a time lag between the observation of our independent and dependent variable, it also inflates the number of observations and leads to underestimated standard errors. As one solution to these concerns, we use annual survey data from the Asia Foundation, which is an opinion poll of about 6,300 Afghan citizens across the 34 provinces of Afghanistan from 2004-2012. A number of scholars have cautioned against the use of direct survey questions to gauge public sentiment in conflict settings, citing Afghanistan as an example and arguing that responses to sensitive questions – particularly questions regarding support for the warring parties – are likely to be biased (Lyall et al. 2013; Blair et al. 2014). Furthermore, many of the relevant survey questions were not asked every year the Asia Foundation survey was taken. Despite these concerns, the data offer a means of testing whether our hypothesized relationship holds using an annual measure of support across provinces.

Table 3 re-estimates our results using the annual data from the Asia Foundation, drawn from two key survey questions. Model 1 measures the level of support for the government using the percentage of citizens who – when asked to think about the economy – did not respond they were less prosperous now when compared to life under the Taliban government. Model 2 measures the level of support for the government using the percentage of respondents who responded “somewhat good job” to the question: “thinking of the National/ Central Government, how do you
feel about the way it is carrying out its responsibilities.” Due to data limitations from the Asia Foundation after 2010, we estimate both sets of models on the data from 2008-2009. As the results indicate, the direction and magnitude of the effect are in line with our hypothesis: as the level of support for the Karzai government increases across provinces, the average rate of attacks against aid workers increases. We caution, however, that both sets of results miss statistical significance due to the small sample size.

Table 3: Alternative Measure of Government Support (Asia Foundation Survey Questions) and the Average Monthly Number of Aid Worker Attacks per year across 34 Afghan Provinces, 2008 and 2009

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>Model 1 (OLS)</th>
<th></th>
<th>Model 2 (OLS)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DV: Avg. Number Aid Worker Attacks</td>
<td>Fixed Effects</td>
<td>DV: Avg. Number Aid Worker Attacks</td>
<td>Fixed Effects</td>
</tr>
<tr>
<td>Pct. Responding: Not More Prosperous Under Taliban</td>
<td>0.413</td>
<td>(0.560)</td>
<td>0.485</td>
<td>(0.409)</td>
</tr>
<tr>
<td>Pct. Responding: Government Doing Somewhat Good Job</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Overall Level of Violence</td>
<td>0.00287</td>
<td>(0.00234)</td>
<td>0.00261</td>
<td>(0.00224)</td>
</tr>
<tr>
<td>Population Size (Logged)</td>
<td>-10.25</td>
<td>(7.244)</td>
<td>-6.497</td>
<td>(5.164)</td>
</tr>
<tr>
<td>Opium Cultivation</td>
<td>-50.44</td>
<td>(45.10)</td>
<td>-44.88</td>
<td>(39.86)</td>
</tr>
<tr>
<td>Total Food Aid</td>
<td>-0.128*</td>
<td>(0.0743)</td>
<td>-0.151**</td>
<td>(0.0720)</td>
</tr>
<tr>
<td>Constant</td>
<td>66.40</td>
<td>(45.57)</td>
<td>66.40</td>
<td>(45.57)</td>
</tr>
<tr>
<td>Observations</td>
<td>54</td>
<td>54</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provinces</td>
<td>27</td>
<td>27</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
6. Conclusion

Why do armed groups direct violent attacks against humanitarian aid organizations? Despite the fact that most humanitarian aid missions are obligated under the Geneva Conventions to remain politically neutral in providing basic human needs, humanitarian aid workers are frequently the targets of violent attacks. This is particularly true in Afghanistan where from April 2008 to December 2012 there were nearly 700 documented attacks against aid workers. These attacks are puzzling because, if aid provisions are suspended, not only do armed groups lose access to future aid provisions themselves, they also risk undermining their base of support among the local civilian population.

In this paper, we proposed a theory to explain variation in attacks against aid workers across provinces in Afghanistan. As the literature on civil wars and counterinsurgency demonstrates, controlling the civilian population is often a central objective for both insurgent and government forces. In this context, by providing public goods, aid organizations can increase support for the government at both the local and national level, thus helping the government to maintain power. Thus, we posited that armed groups often target aid organizations as a means of pushing them out of particular regions to undermine support for the government.

Consistent with this logic, we found significant empirical evidence that armed groups direct violence against aid workers in provinces where civilian support for the government is higher. Using a newly compiled panel dataset on attacks against aid workers across all 34 provinces of Afghanistan from April 2008 to December 2012, we demonstrate that the intensity of attacks increases with the level of political support for the incumbent Karzai government. Indeed, the data suggest that the estimated average number of attacks per month increases roughly 75 percent when moving from the lowest percentile of Karzai vote share to the highest percentile. We also found that insurgents appear to have greater incentives to concentrate attacks in more marginal provinces, where
undermining support for the government could swing a province in insurgents’ favor. Furthermore, support for the government is associated with a greater likelihood of attacks against international aid organizations but not national aid organizations. This is likely because international organizations have demonstrated a consistent willingness to withdraw services in response to attacks. National Afghan organizations, by contrast, tend to have smaller scale operations with limited geographic scope and function by building close relationships within the communities they serve, reducing the likelihood that they will respond to violence by relocating.

These results have important implications for how scholars and practitioners understand humanitarianism in conflict and post-conflict areas. For scholars, we show that the logic of violence against noncombatants may differ from one type of non-combatant to another. Indeed, we suggest that the relationship between aid workers and armed groups may be much different in character than the relationship between civilians and armed groups. While recent research has shed considerable light on the factors driving violence against civilians in civil war, we show that many of the observable implications of these theories are not fully consistent with violence against aid workers. Rather, humanitarian aid workers represent a distinct class of noncombatants, and the logic of violence employed against them seems to be uniquely motivated by their special role in conflicts.

For practitioners, our results also have important implications. Today, impartiality and neutrality are the most broadly accepted principles governing the provision of humanitarian relief worldwide. And yet, it seems impartiality and neutrality are impossible when humanitarian assistance relieves warring parties of the burdens attached to waging war, often times asymmetrically. Consistent with this critique, this paper demonstrates that attacks against aid workers cannot simply be explained as random or opportunistic violence. Instead, such violence is often a deliberate strategy employed by combatants to undermine civilian support for the government. The findings
strongly suggest that the effect of well-intentioned humanitarian assistance may not be benign with respect to the outcome of a civil war.

References


