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Final Project Literature Review

Do Targeted Killings Decrease Terrorist Activity?

The research question for my project is: "Do covert US air strikes delay or hasten subsequent suicide terrorist bombings in the countries where the strikes are carried out?" The question can be reframed more broadly as: "Do targeted killings decrease terrorist activity?" Much work has been done on this question, including theoretical papers, case studies, and large-n empirical studies. In this review I will focus on quantitative large-n studies that specifically test the effects of US air strikes aimed at killing militant leaders on militant activity in Pakistan and Afghanistan.

Theory

Scholars have cited four main theories for how counter-terrorism operations may affect militant organizations: deterrence, disruption, incapacitation, and backlash. Only the backlash theory predicts that counter-terrorism operations will increase, rather than decrease, militant activity.

The deterrence theory predicts that targeted killings will decrease terrorist activity for at least as long as crackdowns continue (Hafez and Hatfield 2006; Johnston and Sarbahi 2016). Originating from the rational choice perspective, the deterrence theory makes the assumption that rational actors make decisions to maximize their net benefit (LaFree et al. 2009). As the government cracks down on terrorist activity through killings, arrests, and other forms of repression, the costs of maintaining the insurgency increase, which then disincentivizes terrorists from further "high-risk activism". Further, counter-terrorist operations deter the population from

supporting terrorist groups by decreasing the terrorist groups' likelihood of success, or that of making any real difference through them (Hafez and Hatfield 2006).

The disruption theory holds that targeted killings interfere with terrorist groups' normal operations and reduce their ability to plan and carry out attacks over time (Hafez and Hatfield 2006; Smith and Walsh 2013; Johnston and Sarbahi 2016). As groups are forced to allocate more time and resources to protecting and replacing important members, they become less able to mobilize resources for attacks. In addition, the loss of experienced and skilled members reduces the quality and success rate of attacks in both the long and short run.

Using a similar logic, the incapacitation theory predicts that targeted killings cripple terrorist groups by removing key individuals from the theater (LaFree et al. 2009; Hafez and Hatfield 2006). Leaders are assumed to play an important role in the groups' operational capabilities; thus, striking down leaders is expected to reduce the groups' effectiveness in the long run. In addition, targeted killings may deter individuals from joining terrorist movements, which will then reinforce the incapacitation effect (LaFree et al. 2009).

In contrast to the above three theories, the backlash theory predicts that targeted killings will increase future violence by magnifying grievances. Rather than deter terrorists, targeted killings may embolden them, triggering even more extreme violence. In addition, they may serve to increase pro-militant sympathies among local civilians, particularly where relations with the government have already soured. This will then allow militants to mobilize more resources and recruits (LaFree et al. 2009; Hafez and Hatfield 2006; Smith and Walsh 2013; Johnston and Sarbahi 2016).

Other models that scholars have put out include reputational concerns, deterrent behavior on the part of terrorist groups themselves, internecine fighting as a result of targeted killings, and organizational concerns. Lyall (2014) suggested that insurgents in Afghanistan step up their violence in response air strikes to preserve their reputations among the local populace. Johnston and Sarbahi (2016) hypothesized that terrorists may attack civilians suspected of cooperating with counter-terrorists so as to deter would-be informants. They also hypothesized that leadership strikes may lead to infighting and consequently more attacks in certain cases, for example when a leader is killed and rival contenders emerge to take his place.

Price (2012), Jordan (2014), and Long (2014) focus on the organizational characteristics of militant groups, arguing that the effectiveness of targeted killings depend on specific aspects of the group in question. Price argues that targeting terrorist leaders is an effective counter-terrorism measure in that terrorist groups are "violent, clandestine, and values-based organizations." which "amplifie(s) the importance of leaders and make(s) leadership succession difficult" (2012). He reasons that violent and clandestine groups are prone to forms of charismatic leadership, where leaders are less likely to delegate important tasks and lay out clear rules for succession, which then leads to catastrophic instability when leaders are killed. Jordan counters this argument, positing that targeting killings against al-Qaeda leadership is ineffective precisely because the group delegates tasks and follows rules. She cites bureaucratization and communal support as the key factors in the effectiveness of a leadership targeting strategy. She maintains that high levels of bureaucratization as typical of "older and larger terrorist groups" allows for smooth and stable transitions in leadership in the wake of a killing, while communal support contributes to group stability by facilitating recruitment and resource mobilization (2014). Likewise, Long (2014) finds that leadership targeting is effective against groups that are

poorly institutionalized but much less effective against highly institutionalized groups, such as al-Qaeda in Iraq (precursor to the Islamic State) and the Taliban.

Empirical studies

The number of targeted strikes increased dramatically beginning in 2008, as the Obama administration moved to reduce US military troops in the Middle East while continuing the commitment to fight al-Qaeda and other designated terrorist groups. In addition to the relative newness of the phenomenon, the difficulty of gathering measures on the incidence and location of strikes has made large-n studies on this topic difficult. Nonetheless, several papers have been published on this topic in recent years. I review their contributions below. A summary of the main papers is presented in table format below.

Studies on the effect of US covert leadership decapitation strikes on terrorist activity

Author, Year	Scope	Ind. Var. (US Operations)	Dep. Var (Terrorist Acts)	Methods	Key Findings
Jaeger & Siddique 2011	Afghanistan & Pakistan, 2007 - 2010	Drone strikes *(New America Foundation)*	All terrorist incidents perpetrated by Taliban *(WITS*)*	Time-series regression	**No effect** in Afghanistan; **decrease** in terrorist incidents in Pakistan
Lyall 2014	Afghanistan, 2006-2011	All air strikes and non-lethal shows of force *(Declassified US Air Force records)*	Insurgent attacks against NATO forces *(Combined Information Data Exchange Network, International Security Assistance Force)*	Neyman-Rubin Causal Model; dynamic matching	**Increase** in insurgent attacks
Gill (2015)	Pakistan, 2004-2013	Drone strikes *(Bureau of Investigative Journalism)*	All attacks *(Global Terrorism Database, University of Maryland)*	Correlations, simple linear regression	**Increase** in attacks
Johnston and Sarbahi 2016	Pakistan, 2007-2011	Drone strikes *(New America Foundation)*	All terrorist incidents *(WITS)*	Fixed-effects regression	**Decrease** in attacks

*WITS = Worldwide Incidents Tracking System database, National Counter Terrorism Center

At first glance, the findings appear contradictory. Lyall (2014), looking at the effects of air strikes in aggregate and drone strikes separately, found that recently struck areas in Afghanistan saw increased levels of insurgent attacks. Gill (2015), examining drone strikes only, found that increases in the incidence of drone strikes are associated with an increase in terrorist incidents in Pakistan. On the other hand, Johnston and Sarbahi (2016) found that drone strikes were effective in decreasing terrorist attacks in Pakistan. Jaeger and Siddique (2011) found that drone strikes had no significant effect on terrorist violence in Afghanistan, but significantly decreased terrorist violence in Pakistan.

However, it is not possible to generalize the results of any one study to imply the results of others, as the authors focus on different regions and periods. Most of the studies focus on one country each, and all address the Afghanistan-Pakistan region. No study deals with data from other major theaters, such as Yemen and Somalia. Acknowledging this limitation is important for understanding the implications of the findings for covert leadership strikes as a strategy. It is necessary to evaluate the effect of drone strikes in multiple theaters in order to understand the potential roles of various geographical, political, and cultural factors, as well as more specific characteristics pertaining to the different groups and factions being targeted, on the effectiveness of the targeted strikes strategy. In fact, Jaeger and Siddique's finding suggests that the effects of drone strikes on terrorist violence may be country-specific, as they found different results in Afghanistan and Pakistan despite the two countries being immediate neighbors.

In addition, there are multiple data sources being used, and consequently different ways of framing the issue. For example, in terms of the independent variable, or targeted strikes, Jaeger and Siddique (2011) and Johnston and Sarbahi (2016) used drone strike data from the New America Foundation. Gill (2015) used drone strike data from the Bureau of Investigative

Journalism. The New America Foundation and the Bureau of Investigative Journalism both draw their data from media reports, but use different methodologies. Lyall (2014) used declassified air force data to include "all air strikes and non-lethal shows of force" as recorded by the military.

Perhaps even more importantly, the use of different data sets for terrorist incidents implies different definitions for terrorist activity. The Worldwide Incidents Tracking System (WITS) database used in two of the studies defines terrorist acts as "'incidents in which sub-national or clandestine groups or individuals deliberately or recklessly attacked *civilians or noncombatants* (including military personnel and assets outside war zones and war like settings),'" where terrorists "must have initiated and executed the attack" (Jaeger and Siddique 2011, emphasis mine). On the other hand, Lyall drew on military data to focus specifically on insurgent attacks against NATO forces – not civilians – as his dependent variable. The distinction between civilian and military targets is important as militants are likely to target different sets of targets for different reasons. However, attacks rarely affect purely military targets or purely civilian targets, particularly in insurgencies when the line between combatant and non-combatant is often blurred.

In terms of methodology, the studies deal mainly with the effects of the incidence of targeted killings on the incidence of terrorist activity. In addition, Lyall (2014) and Johnston and Sarbahi (2016) deal with the spatial dimension, linking air strikes to terrorist incidents by region. However, no study has conducted a thorough examination of the effects of targeted strikes on the duration of the lulls between terrorist attacks, which is the focus of my research question. Gill (2015) and Johnston Sarbahi (2016) deal with duration models only as extensions to their main analyses and offer no conclusive results.

Despite the differences between the studies, a common thread emerges. Drone strikes appear to be at least somewhat effective at reducing terrorist activity in Pakistan, while being less successful in Afghanistan. I discount Gill's finding in favor of the others' as his simple models using correlations and simple linear regression does not account for as many factors as the other models do. However, the small number of studies gives pause to arriving at any definite conclusion.

Conclusion

While the study of targeted killings as a counterterrorism strategy is not new, the topic of targeted killings as a counterterrorism strategy via US covert action against al-Qaeda and other high profile militant groups is yet in its infancy. Thus, many gaps remain, largely in terms of bridging framing and methodological differences between studies. Areas for advancement including using new and more inclusive data covering different regions and time frames, and testing different types of models including but not limited to spatio-temporal and duration models.

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