

Rebel Territorial Control and Civilian Collective Action in Civil War

Evidence from the Communist Insurgency in the Philippines

Michael A. Rubin*
Postdoctoral Scholar
Center for Peace and Security Studies
Department of Political Science
University of California, San Diego

Please find the latest version of the paper and appendix at www.michaelarubin.com/research.html.

Word Count: 10,811

May 6, 2019

*Contact: mrubin@ucsd.edu. Research for this article was supported by the National Science Foundation Law and Social Sciences program (Award Number: 1535598) and the Weatherhead East Asia Institute at Columbia University. The author acknowledges the Government of the Philippines Office of the Presidential Adviser on the Peace Process (OPAPP) and Department of Social Welfare and Development (DSWD) for providing data for this research project. Gail Ilagan and the Association of Psychologists Helping Practitioners (APHP) based in Davao City, Philippines were instrumental in collecting the interviews reported in the article. The author acknowledges institutional support from the Center of Peace and Security Studies at the University of California San Diego (UCSD), the Institute for Quantitative Theory and Methods (QuanTM) at Emory University, and the Institute of Philippine Culture at Ateneo de Manila University. The author thanks Page Fortna, Massimo Morelli, Macartan Humphreys, Jack Snyder, Dani Reiter, Oliver Kaplan, Ana Arjona, Laia Balcells, Jim Walsh, Shane Barter, Cesi Cruz, Sarah Khan, Stephanie Schwartz, Egor Lazarev, Rick McAlexander, Nicholas Lotito, Rick Morgan, Megan Stewart, and Nina McMurry for helpful comments. Thanks to participants in the Order, Conflict, and Violence seminar at Yale University (especially Stathis Kalyvas, David Minchin, and Consuelo Amat), the University of Connecticut political economy seminar (especially Shareen Hertel and Lyle Scruggs), the QuanTM speaker series at Emory University, and panel attendees at the 2017 APSA and 2018 ISA annual meetings.

Abstract

Under what conditions do rebel organizations control territory during civil war? How do civilians influence the distribution of territorial control? This article introduces a civilian agency theory, emphasizing community collective action capacity (CAC) defined by underlying social network structure, to complement existing explanations of territorial control. I argue communities with greater CAC mobilize information and resources more efficiently, increasing belligerents' incentives to control territory. However, CAC also increases community bargaining power to demand costly investments in governance, partially offsetting these gains. CAC increases rebel control in areas of state neglect. But, as state service provision increases, communities leverage CAC to demand prohibitively costly rebel governance, deterring rebel control. The article tests the theory in the context of the communist insurgency in the Philippines, using military intelligence reports from 2011-2014 to measure village-level communist insurgent territorial control and a household-level census (2008-2010) to measure village CAC. Interviews with village elders in Eastern Mindanao illustrate causal mechanisms and explore alternative explanations.

The distribution of belligerents' control over territory, and the population and resources within it, is central to understanding civil wars. Territorial control shapes a variety of conflict processes, including civilian collaboration (Kalyvas 2006) and participation (Humphreys and Weinstein 2008), belligerents' use of violence (Humphreys and Weinstein 2006, Kalyvas 2006, Weinstein 2007), conflict intensity and duration (Buhaug, Gates and Lujala 2009), rebel governance (Mampilly 2011, Stewart 2018), state-building and economic development. As Arjona (2015, p. 1) has put succinctly: "at core, all civil wars are a battle for control between a government and its competitors over civilians and the territory upon which they reside."

If territorial control is as crucial to understanding civil war as the literature suggests, it is essential to understand its origins. Existing research privileges structural military, economic, and geographic factors and civilians' political *interests* and identity to explain the distribution of territorial control. Both revolutionary (Guevara 2002 [1961], Mao 2007 [1937]) and counterinsurgency (Galula 2006 [1964], Nagl et al. 2008) doctrine emphasize the importance of manipulating civilian interests, to win popular support, as necessary to achieving military success. This article contributes to the literature by emphasizing the role of civilian *capabilities*. I argue community *collective action capacity*, the ability to mobilize collective action to pursue common interests, influences rebel groups' territorial control, and that its effect is moderated by the community's *outside options* for protection from violence and access to basic services, primarily from the state.¹

Because communities with greater collective action capacity gather resources and control access to information more efficiently, belligerents prefer to control territory in which communities possess high collective action capacity, all else equal. Nevertheless, collective action capacity may also empower communities to hold belligerents accountable to higher standards of (costly) governance, cutting against benefits to territorial control. Civilians may

¹As Kaplan (2017) shows, communities assert autonomy from belligerents without state protection. For simplicity, and because the state represents the insurgents' main competitor for territorial control, I focus on the state here.

reward (punish) belligerents that promote (violate) community interests (Berman, Shapiro and Felter 2011, Condra and Shapiro 2012, Shaver and Shapiro forthcoming). As the weaker side in asymmetric conflict, rebels are especially dependent on support, and vulnerable to retribution, from the population.

These countervailing mechanisms imply a conditional relationship. Where the state cannot provide basic services and security (weaker outside options), collective action capacity *encourages* rebel control. The community accepts rebel control at low investment in governance because even minimal rebel governance improves the status quo. Therefore, rebels' surplus benefits associated with higher collective action capacity outweigh the expected governance costs. As community access to state services increases (stronger outside options), collective action capacity *deters* rebel control. The community leverages collective action capacity to hold rebels accountable to prohibitively expensive standards of governance.

I test the theory's empirical implications in a regression framework, using village-level data from the communist insurgency in the Philippines. Armed Forces of the Philippines (AFP) military intelligence assessments measure village-level insurgent territorial control from 2011-2014, providing a rare opportunity to measure the elusive concept of territorial control during conflict with precision.² I measure collective action capacity from its micro-level foundations in kinship networks using a household-level census provided by the Department of Social Welfare and Development. Results are consistent with the theory: in villages with low government service provision, rebel control *increases* in village cohesion, while the effect reverses as access to state protection and services increases. Interviews with village elders from three provinces in Eastern Mindanao illustrate the mechanism linking rebel territorial control to community social structure through community collective action.

The article contributes to the literature by explaining civilians' role in the distribution of territorial control during intrastate conflict, endogenizing a key explanatory variable in

²AFP intelligence data were provided to the author by the Office of the Presidential Adviser on the Peace Process (OPAPP).

the predominant “control-collaboration” model of armed conflict (Kalyvas 2006, 2012) and building on a burgeoning literature emphasizing civilian agency to influence belligerents’ conduct *within* their areas of control. Because the antecedent process by which belligerents establish territorial control generates the context in which subsequent belligerent conduct takes place, the conclusions yield important insights for the origins, conduct, intensity, and outcomes of civil war.

1 Existing Literature

Conventional wisdom suggests that the balance of military capabilities largely determines the distribution of territorial control (Kalyvas 2006). Because of the state’s overall military advantage, rebels are generally confined to remote areas in which they possess a *localized* advantage over state forces. Mountainous terrain, forest cover, and other geographic impediments to moving troops and heavy equipment contribute to the state’s *loss of strength gradient* (Boulding 1962), increasing the costs to counterinsurgent operations, extending rebels’ time horizon of territorial control (Humphreys 2005), and increasing the likelihood of civil war (Fearon and Laitin 2003).

Military capabilities explain why rebels typically control territory in remote areas (Buhaug 2010, Holtermann 2016), but cannot account for variation in territorial control within the periphery, nor explain rebel control closer to centers of state power. Explaining belligerent conduct in the periphery is crucial because civil conflict remains intractable due to states’ inability to project power throughout their sovereign territory. Military capabilities may represent an important predictor of territorial control (Kalyvas 2006), but its effect is still probabilistic rather than deterministic, and leaves the role of civilians under-theorized. Civil war is fought on human terrain, in which the local population influences the belligerents’ interests, costs, and capabilities to seize and retain territorial control. The civilian agency theory advanced in this article explains deviations from military strength determining terri-

torial control and the community's role as a force-multiplier.

Economic incentives may explain deviations from capabilities-based predictions of rebel control. Rebels seek to control territory rich in economic endowments, especially "lootable" natural resources, to finance the rebellion (Collier and Hoeffler 2004, Le Billon 2001, Morelli and Rohner 2015, Weinstein 2007), or in productive local economies from which to extract "revolutionary taxes" (Berman et al. 2011). Economic development programs (Berman et al. 2013, Crost, Felter and Johnston 2014) and foreign aid (Nielsen et al. 2011, Nunn and Qian 2014) increase target communities' economic security *and* exposure to violence, possibly due to rebel incentives to seize surplus resources, without enhancing long-term government territorial control (Sexton 2016). Though economic value may account for rebel incentives to seek control beyond their areas of military advantage, the government also has incentives to control territory with economic value. To explain why rebels may control certain economically desirable areas but not others, and why they control some economically unproductive areas but not others, requires incorporating the role of the local civilian population in shaping belligerent incentives.

Existing research has proposed a variety of political *interest*-based mechanisms to explain civilians' role in the distribution of belligerent territorial control. Communities may align with rebels, and thereby encourage rebel control, when they suffer relative deprivation (Gurr 1970), pre-conflict organizational ties to the rebel movement (Sarbah 2014, Staniland 2014, Wickham-Crowley 1992), moral and/or emotional motivations to oppose the state (Petersen 2001, Wood 2003), political incentives to promote violence to alter the balance of power across partisan cleavages (Balcells 2017), or low economic opportunity costs associated with rebellion (Collier and Hoeffler 2004, Dube and Vargas 2013, Humphreys and Weinstein 2008). Political and economic exclusion based on ethnic or identity categories exacerbate conflict (Buhaug, Cederman and Rød 2008, Horowitz 1985, Wucherpfennig et al. 2012), especially when corresponding to socioeconomic hierarchy (Cederman, Weidmann and Gleditsch 2011, Gubler and Selway 2012, Wickham-Crowley 1992).

In contrast to the above, [Berman, Shapiro and Felter \(2011\)](#) endogenize civilian interests and alignment to conflict processes, formalizing the information-centric counterinsurgency theory. Civilians punish belligerents perpetrating civilian-targeted violence by providing information to their enemy ([Berman, Shapiro and Felter 2011](#), [Shaver and Shapiro forthcoming](#)), despite increased risk of being targeted by the perpetrator ([Hirose, Imai and Lyall 2017](#)).

Though civilians' interests and underlying political allegiances are clearly important drivers of their actions during conflict, their effects are, again, probabilistic rather than deterministic. As [Kalyvas \(2006\)](#) shows, civilians frequently deviate from supporting their co-partisans. Furthermore, civilian interests do not explain the value of their collaboration, which is an essential consideration for rebels risking exposure to government reprisals. This article contributes a *capabilities*-based mechanism linking civilian agency to conflict processes. Communities' abilities to mobilize collective action influences belligerent territorial control during civil war alongside variation in political or material interests.

Existing research suggests civilian capabilities may influence belligerent conduct *within* their areas of operation; including through civilian mobilization patterns ([Shesterinina 2016](#)) or resistance ([Petersen 2001](#)) and autonomy (self-protection) strategies ([Kaplan 2017](#)), rebels' resilience and fighting capacity ([Parkinson 2013](#)), and the form of rebel-imposed social order ([Arjona 2016](#)). [Arjona \(2016\)](#) argues local institutions' legitimacy and efficacy influence the social order rebel groups impose in areas they control, through a mechanism similar to collective action capacity, but does not purport to explain why rebels control the pieces of territory that they do. This article contributes by exposing the important effect of civilian capabilities in explaining where belligerents operate in the first place, and how the effect is conditioned by the state's presence.

[Kaplan \(2017\)](#) and [Larson and Lewis \(2018\)](#) investigate civilians' role in outcomes more closely related to territorial control. [Kaplan \(2017\)](#) argues social cohesion enhances communities' ability to preserve autonomy from belligerents, but does not explain the conditions

under which communities leverage cohesion to enhance the territorial control of one belligerent over another. [Larson and Lewis \(2018\)](#) find that community fragmentation threatens rebel survival, while cohesion enhances rebel viability, by disseminating rumors that affect civilians' beliefs about rebels' viability and thereby whether community members provide information to the government. This article contributes by exploring local-level variation in rebel control, as opposed to aggregate group survival and growth, and how state presence influences community collaboration, with consequences for territorial control. Departing from [Kalyvas \(2006\)](#), which emphasizes individuals' incentives to leverage belligerents' violence to wage communal conflict, I argue local collective action capacity increases the efficacy of cooperative strategies to manage conflict processes.

2 Civilian Agency Theory of Rebel Territorial Control

2.1 Definitions

Territorial control is defined by a belligerent's ability to move freely, access information and resources, and prevent its enemies' movement and access in a particular place and time.³ Territorial control is a continuous concept: a combatant may have partial control if it can restrict, even if not eliminate, its enemy's movement and access. *Segmented* territorial control describes areas in which one belligerent enjoys exclusive access to resources, while *fragmented* control describes conditions in which two or more belligerents each retain partial access ([Kalyvas 2006](#), [Staniland 2012b](#)).

Governance is the set of "institutionalized modes of social coordination to produce and implement collectively binding rules, or to provide collective goods," ([Risse 2012](#), p. 700). Rebel governance, specifically, refers to rebel actors' provision of rules and goods/services

³This definition incorporates components from [Race \(1973, p. 277\)](#), [Kalyvas \(2006, p. 210\)](#), and [Kasfir \(2015, p. 26\)](#).

to non-combatant populations.⁴ Rebels may provide security from external threats, public safety, resolve disputes, and even basic services such as medical care and education (Mampilly 2011, p. 17). Alternatively, rebels may govern through dominance, relying on coercive violence to impose social order.

I define collective action capacity as communities' ability to facilitate joint action in which "groups composed of self-interested and interdependent individuals seek to develop and carry out cooperative plans," (Ober 2008, p. 7), despite distributional conflict or other divisive pressures. During conflict, community members may share interests in limiting exposure to political violence and maximizing access to essential services, but face pressures to compete over scarce resources and security.

Collective action capacity varies with four main community characteristics. *Generalized trust* reflects the expectation that others will comply with norms governing social interactions and forego short-term incentives to preserve long-term cooperation. *Other-regarding preferences* refer to individuals' willingness to forego self-interest to promote community welfare. The *inclusiveness* of local institutions contributes to a community's experience with consensus-building processes for generating compromise solutions to distributional conflict. The density of interactions across social group divides, or *cross-cutting cleavages*, promotes communication across group boundaries and facilitates detection and sanctioning of non-cooperative behavior.

I operationalize collective action capacity by observing communities' *bridging social capital*. Social capital is defined as "the norms and networks that enable people to act collectively" (Woolcock and Narayan 2000, p. 226), and bridging refers to ties across social cleavages (Putnam 2001).⁵

⁴Arjona, Kasfir and Mampilly (2015, p. 3) similarly define rebel governance as "the set of actions insurgents engage in to regulate the social, political, and economic life of non-combatants during war."

⁵Though *bonding* (social ties within insular groups) may also facilitate collective action by enhancing in-group policing (Fearon and Laitin 1996), I focus on bridging, which has been shown to enhance government performance (Putnam 2001, Putnam, Leonardi and Nanetti 1994), public goods provision (Habyarimana

2.2 Rebel and Civilian Interests and Actions

The theory focuses on community-level interaction between rebel personnel and civilians. The local-level rebel actor is a mobile semi-autonomous unit subordinate to the rebel organization's central leadership. Because they have detailed local knowledge of enemy capabilities and community needs, local units must possess some discretion over where and how to establish territorial control in their operational zones.

Rebels derive benefits from *population-based*—obtained from local collaboration—and *territorial*—not dependent on local collaboration—resources in areas they control. Territorial resources include lootable primary commodities and natural resources as well as physical geography, which influences the costs and time horizon of control. Population-based resources include financial contributions (“revolutionary tax”) and access to food, shelter, supplies, and information. Local wealth and economic productivity increase the stock of extractable resources (tax base), and therefore increase rebels' potential income. Because they are clandestine organizations vulnerable to counterinsurgent reprisals, rebels rely on civilians to hide personnel and equipment from counterinsurgents (population concealment).

The costs to seize and maintain control at least partially offset these gains. *Entry costs* include sending personnel and resources to assess local conditions, mobilize support, and remove government presence. *Governance costs* represent the investment in goods and service provision required to maintain local support, monitor community activities, and the coercive apparatus required to establish public order and deter or defeat counterinsurgent challengers.

Communities are comprised of individuals with at least occasionally competing interests. Nevertheless, every community has important dimensions along which members share a common interest; chiefly maximizing access to basic goods and services and minimizing destructive civil war violence. Furthermore, communal conflict is more costly than peaceful political and economic competition, so communities prefer to avoid folding the insurgency

et al. 2009), management of common pool resources Ostrom (1990, 2000), social movement organization (Tarrow 1994), and reduce communal conflict (Varshney 2001).

into their local rivalries. Though it departs from the predominant control-collaboration model (Kalyvas 2006, 2012) in which distributional conflict incentivizes community members to compete rather than pursue common interests, this common-interests assumption does not reject the competitive dynamics. Rather, the framework complements existing literature by taking seriously the incentives to pursue strategic cooperation and explaining the conditions under which communities resist competitive pressures.

To preserve parsimony, the theory focuses on civilians' and rebels' interests in security and resources. Civilians may, of course, prefer one belligerent over another, which influences community outside options. Rebels may have non-material motives for controlling territory; for example, historical/symbolic significance or interest in protecting the community. The emphasis on material incentives does not imply that communities' partisan preferences or rebels' non-material interests are irrelevant to explaining variation in territorial control. Rather, the theory complements these arguments with attention to the constraint that rebels must weigh these alternative incentives against vulnerability to civilian reactions. I assume only that communities and rebels prioritize survival. Nor does the civilian agency theory negate the possibility that certain rebel organizations, for example those with financing from natural resources or external support, may be less vulnerable to civilian agency than others (Fortna, Lotito and Rubin 2018). Because even well-financed rebel organizations rely on civilian support and population concealment to move freely through contested territory and avoid counterinsurgents, they are not immune to civilians' exercising of agency.

I assume rebels are more sensitive than counterinsurgents to community collective action capacity. Because rebels have limited military and administrative resources, they rely on population concealment to remain clandestine, and are therefore especially vulnerable to civilian defection. Counterinsurgents operate in the open, possess greater firepower, are backed by state administrative and financial resources, and can retreat to military bases when under threat. Therefore, the state enjoys a freer hand in allocating resources to economically or militarily valuable villages, while collective action capacity exercises a critical constraint

for rebel investment in territorial control.

2.3 Collective Action Capacity, Rebel Governance, and Territorial Control

Community collective action capacity influences rebels' incentives to control territory through the benefits from local collaboration and the governance costs required to maintain community support. Communities with greater collective action capacity provide more valuable collaboration. They mobilize resources, control the flow of information, and monitor and sanction defection across social cleavages more efficiently. All else equal, rebels prefer to control territory with high collective action capacity populations.

Because they are interested primarily in physical and economic security, civilians may attempt to hold rebels accountable to adequate investment in protection and service provision. If rebels neglect or threaten community interests, communities may withhold collaboration, provide information to counterinsurgents, or resist rebel presence. Social ties across cleavage lines decrease the costs of cooperation and increase individuals' willingness to pursue collective goals despite distributional conflict and free-riding incentives. Dense social ties increase the social costs of defection, alienating individuals from community social and economic exchange, and increase the likelihood of punishment by facilitating collective monitoring of individual actions. Collective action capacity enhances community ability to enforce rebel accountability, thereby raising expected governance costs and cutting against rebel incentives to control territory.

Whether collective action capacity has a net positive or negative effect on rebel incentives to control territory depends on the expected governance costs. Strategic communities demand the highest investment in rebel governance that leaves them indifferent to the rebels' territorial control; simultaneously deterring predatory rebels while inviting rebels whose investment in governance would improve community security and access to goods and services. The community's *demand* for investment in governance, then, depends on its outside options

Table 1: The Conditional Effect of Collective Action Capacity (CAC) on Rebel Governance and Territorial Control

		State Service Provision	
		Low	High
CAC	Low	<ul style="list-style-type: none"> • Low Value Collaboration • Lowest Gov. Cost: <ul style="list-style-type: none"> · Low Demand · Weak Enforcement 	<ul style="list-style-type: none"> • Low Value Collaboration • High Gov. Cost: <ul style="list-style-type: none"> · High Demand · Weak Enforcement
	High	<ul style="list-style-type: none"> • High Value Collaboration • Low Gov. Cost: <ul style="list-style-type: none"> · Low Demand · Strong Enforcement 	<ul style="list-style-type: none"> • High Value Collaboration • Highest Gov. Cost: <ul style="list-style-type: none"> · High Demand · Strong Enforcement
		CAC ↑ Rebel Control	CAC ↓ Rebel Control

associated with state service provision⁶ and its collective action capacity to enforce rebel accountability.

Table 1 illustrates the effect of community collective action capacity on rebel territorial control *conditional on state services*. Under low state service provision, collective action capacity *increases* rebel territorial control. The community must be willing to accept rebel control at low investments in governance because the state does not offer competitive services. Rebels identify stronger incentives to control territory in high collective action capacity communities, which yield more valuable collaboration but only slightly higher governance costs due to weak community demand. By contrast, under high state service provision, collective action capacity *decreases* rebel territorial control. High collective action capacity communities do yield valuable collaboration, but they also demand prohibitively expensive service provision and retain the capacity to enforce accountability. Though rebels expect inefficient collaboration from low collective action capacity communities, weak enforcement keeps the governance costs sufficiently low.

⁶Mampilly (2011) argues, similarly, that a history of state penetration increases civilian demands for rebel governance.

Generally, state service provision and community collective action capacity are continuous, rather than discrete, variables. As state service provision increases, the community demands greater service provision (governance costs grow), and the net positive effect of collective action capacity on rebel control declines accordingly. Under sufficiently high state service provision, the community demands investment in governance sufficient to deter rebels from seeking territorial control in the first place.

Hypothesis 1. *In areas of low state service provision, community collective action capacity increases rebel territorial control. The positive effect of collective action capacity declines, and reverses direction, as state service provision increases.*

3 Communist Insurgency in the Philippines

Leveraging pre-existing networks established during the earlier Huk rebellion, the Communist Party of the Philippines (CPP) formed on December 26, 1968. The CPP established the New People’s Army (NPA) on March 29, 1969 “to wage a protracted People’s War... to overthrow the government and replace it with a ‘national democratic’ system with a socialist perspective,” (Santos et al. 2010). Capitalizing on popular grievances against the state, CPP-NPA activity peaked following President Ferdinand Marcos’ declaration of Martial Law in 1972 and subsequent consolidation of power under a personalist dictatorship associated with widespread human rights abuses. By 1987, the CPP boasted over 30,000 party members, the NPA peaked at approximately 25,000 personnel, and the movement reached 8500 villages across 50 provinces, roughly 20 percent of the country’s population (Kessler 1989, pg. 28), (Felter 2005, pg. 38). The CPP-NPA continued the insurgency after the 1986 democratic transition, claiming political elites did not address underlying grievances related to economic inequality and rampant corruption (Abinales and Amoroso 2005, p. 115).

Implementing a classic Maoist insurgency, NPA cadres first establish bases in historically neglected *barangays* (villages) and incrementally expand territorial control towards urban

centers.⁷ In some areas, the CPP-NPA established a system of taxation, business ventures, implemented rural development plans and farmers' cooperatives, and provided other forms of governance (Kessler 1989, p. 74-75). Even recently, the CPP-NPA has controlled territory by establishing "shadow government" to administer barangays and build support networks among the population (Torres Jr 2011, p. 6).

Historical accounts and interviews with AFP personnel suggest the CPP-NPA pays close attention to community social characteristics prior to infiltrating villages.⁸ Political operatives first estimate local counterinsurgent strength, assess community access to services, identify victims of social injustice, map social and leadership structure, and estimate the local taxable base (Kessler 1989, p. 66). Occasionally, CPP-NPA personnel conduct a formal community needs assessment, the Social Integration and Class Analysis (SICA), to estimate the costs associated with territorial control in the community.

*SICA... is a process by the NPA of studying the social conditions of the community... they will find out what are the basic services that are lacking in the community... who are influential in the community, the [community] structure. Who are pro-government? Who have predicaments against the government?... They would capitalize on the conditions of the community through that study.*⁹

Data constraints restrict econometric analysis to four years (2011-2014) during President Benigno Aquino III's administration (2010-2016). The preceding Arroyo administration (2001-2010) conducted a heavily enemy-centric "all-out war" strategy against the insurgency. Though it cleared many areas of NPA control, the campaign failed to address political grievances underlying communist support and alienated communities subjected to civilian-targeted violence, leaving cleared villages vulnerable to insurgent re-capture (Santos et al.

⁷See Kessler (1989) and Santos et al. (2010).

⁸Interviews with Brigadier General Alejandro Estomo (Ret.), Sept. 14, 2015; Colonel Jake Obligado, Nov. 12, 2015.

⁹Interview with Colonel Jake Obligado, Nov. 12, 2015.

2010, p. 29). President Aquino’s Internal Peace and Security Plan (IPSP),¹⁰ modeled after the U.S. Government’s 2009 Counterinsurgency Guide¹¹ emphasizes the “hold” and “build” phases of population-centric counterinsurgency largely ignored under previous administrations. Peace and Development Teams (PDT) remain for 6-12 months to deliver goods and services and institutionalize governance structures.¹² The strategic shift to population-centric COIN, even if imperfect, and the concurrent collapse of NPA strength implies a hard test for the theory’s predictions regarding the conditions under which community collective action capacity increases rebel territorial control.

3.1 Kinship in the Philippines

Spain’s colonial government absorbed the *barangay*—extended family network under the leadership of a local headman (*datu*)—into its administrative system and made *datu*s the local *cabezas de barangay* (village heads) responsible for collecting tribute from households (Cullinane 1998, p. 285-286). The family remains the primary social, economic, and political unit in Filipino society (Cruz, Labonne and Querubin 2017), making it the appropriate unit to investigate community collective action capacity. The family “provides employment and capital, educates and socializes the young...” and forces individuals to remain forward-looking as they seek to preserve the family’s “... honor, lands, capital, and values to the next generation” (McCoy 1993, p. 7).

To secure basic services and economic security throughout a history of state weakness, families organize into *clans*, “an intricate value system emphasizing reciprocity among individuals... based on blood ties and ritual kin relations... creating a series of overlapping family circles,” (Kessler 1989, p. 22). Within the clan, “behavior... is regulated by ethics and norms that are unwritten and informal, depending for their effectiveness upon internalized

¹⁰http://www.afp.mil.ph/images/pdf/ipsp_bayanihan.pdf

¹¹<http://www.state.gov/documents/organization/119629.pdf>

¹²OPAPP representative, Paul Escobar.

sanctions,” (Corpuz 1965, pg. 83). The system encourages cooperation within, and competition across, kin networks (Kessler 1989, p. 22). Inter-clan marriages, then, may enhance bridging capital by increasing trust and communication across clan lines.

4 Quantitative Research Design and Results

This section describes the data used to test Hypothesis 1 in a regression framework, specifies the econometric model, and interprets the results. The main sample includes 12450 villages within 567 municipalities and 56 Provinces. Because the CPP-NPA have not contested territory in the vicinity, the sample excludes the National Capital Region (NCR) and the Autonomous Region of Muslim Mindanao (ARMM).

4.1 Data

4.1.1 CPP-NPA Territorial Control

Yearly (2011-2014) Armed Forces of the Philippines (AFP) intelligence assessments rank the level of communist insurgent territorial control in each village on a 4-category scale: 0) unaffected 1) threatened, 2) less-influenced, and 3) influenced.¹³ The AFP categorize villages based on information (or lack thereof) from local contacts, the presence of communist party-affiliated political committees, and estimates of armed personnel and firearms.¹⁴ “Influenced” villages contain a Barangay Revolutionary Council (BRC), the political leadership cadre formally affiliated with the CPP party branch, as well as social organizations for mass participation. The local NPA “people’s” militia is judged capable of planned attacks on the military or government outposts. “Less-influenced” villages contain weaker participation

¹³These data are not produced for public consumption, but were generously supplied by the Office of the Presidential Adviser on the Peace Process (OPAPP) for research purposes.

¹⁴Author interview with former Intelligence Officer, Mark Posadas on Feb. 28, 2015. Definitions in the AFP Summary Conflict-Affected Areas Report provided by OPAPP.

in party and/or mass organizations and the local militia may be able to conduct targeted attacks only under especially favorable circumstances. In “threatened” villages, CPP-NPA personnel are either at the infant stages of mass organization or are essentially rogue criminal organizations engaged in extortion.

The AFP provides these assessments to peace-building and economic development agencies to note areas to avoid implementing programs for security reasons related to insurgent presence.¹⁵ Therefore, the rankings conform to the definition of territorial control above, measuring NPA access to resources and information (Kalyvas 2006) and its capacity to deter government agents from establishing presence (Kasfir 2015, p. 26). The 2012 assessment does not distinguish between “less-influenced” and “influenced” nor between “threatened” and “unaffected” designations, collapsing to a binary classification. This binary measurement is substantively relevant: many “threatened” villages are those in which NPA units have devolved into criminal bands no longer under central command and control.

Table 2: CPP-NPA Control by Year

	Influence (0-3)				Influence ≥ 2	
	0	1	2	3	0 & 1	2 & 3
2011	32516 85.9%	4165 11%	686 1.8%	466 1.2%	36681 97%	1152 3%
2012					36742 97.1%	1091 2.9%
2013	33696 89.1%	3122 8.3%	621 1.6%	394 1%	36818 97.3%	1015 2.7%
2014	36707 97%	562 1.5%	271 0.7%	293 0.8%	37269 98.5%	564 1.5%

No. Villages (excluding ARMM, NCR): 37833

Figure 1a depicts the 1568 villages (4%) exposed to communist control in at least one year. Figure 1b and Table 2 demonstrate the number of communist-controlled villages declined precipitously over the panel, from 3% in 2011 to only 1.5% in 2014. Nevertheless, NPA cells

¹⁵It is unlikely that assessments reflect bias to favor the AFP’s reputation, since this would put at risk government employees and programs and assessments are classified.

Figure 1: CPP-NPA Control 2011-2014

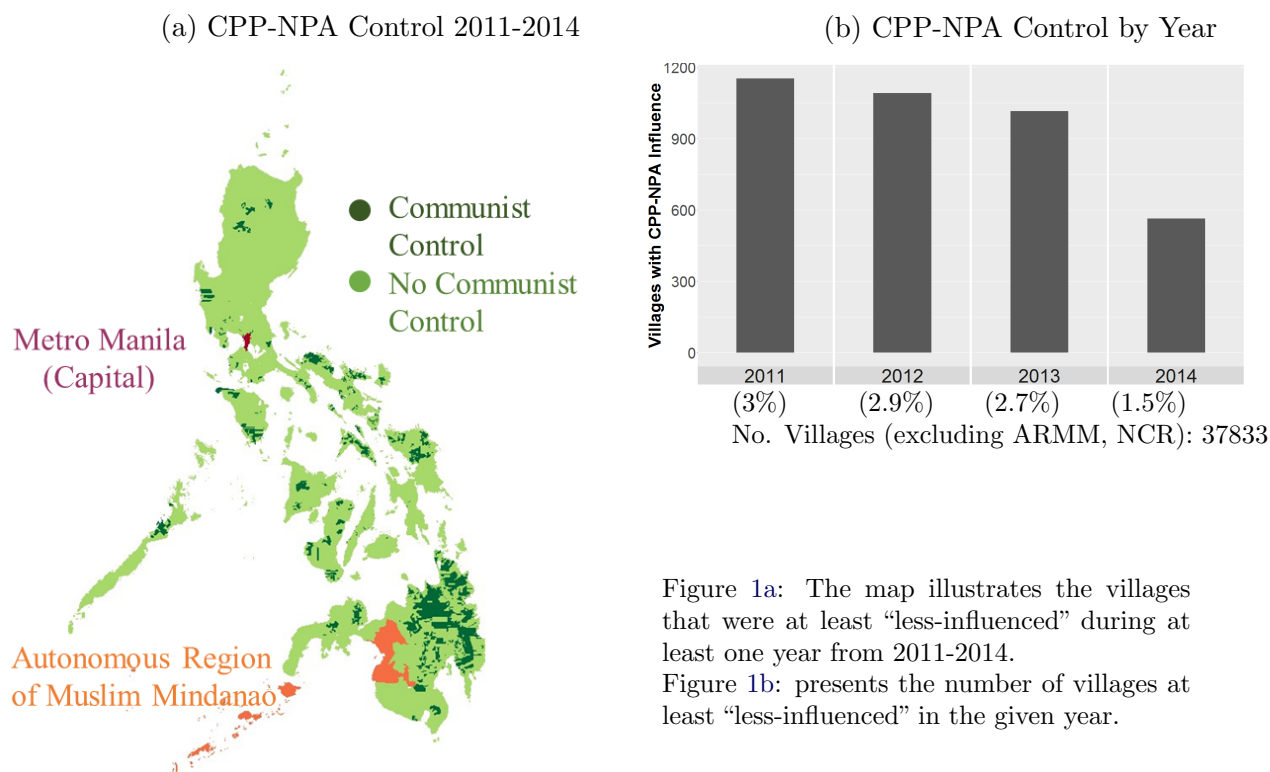


Figure 1a: The map illustrates the villages that were at least “less-influenced” during at least one year from 2011-2014. Figure 1b: presents the number of villages at least “less-influenced” in the given year.

still thrive in remote areas, especially in eastern Mindanao, the large southern island with a history of low state penetration and economic exploitation of the indigenous population.

4.1.2 Collective Action Capacity

To measure collective action capacity, I leverage kinship ties, which represent the foundation of daily social, economic, and political life in the Philippines. I construct village-level kinship networks using household head family names recorded in the National Household Targeting Survey (NHTS), a census conducted during 2008-2010.¹⁶

¹⁶The appendix presents preliminary checks on the family network-based measures by investigating their correlation with observed collective action outcomes in a limited sub-sample of villages, with weak but suggestive support. Because the measure has strong face validity, I argue that leveraging family network structure represents an important empirical contribution despite challenges to verifying its content validity. Existing research suggests social network structure shapes information transmission and collective action in situations in which costly individual actions are required to achieve common interests (Chwe 1999, Gould

Modularity measures divisiveness in network structure (Clauset, Newman and Moore 2004), the inverse of bridging social capital. A community-detection algorithm optimizes divisions between groups of individuals in a network and compares the number of observed within-group edges to the *expected* number if edges were distributed randomly. Modularity ranges from $[-0.5, 1]$, where positive values indicate that the observed within-group edges exceed the number expected under random assignment.¹⁷ High modularity suggests a divided community in which intermarriage between groups is rare. So that results may be easily interpreted, I measure bridging social capital by reversing the scale, creating a “bridging” statistic with range $[-1, 0.5]$. The appendix presents results using alternative network measures of bridging, yielding similar results.

Figure 2 illustrates two examples of village networks, and illustrates how differences in the structure of family ties generate variation in bridging. Figure 3a illustrates the distribution of village-level bridging in the sample is concentrated at low values within its range, and exhibits significant variation from 1.44 standard deviations below to 9.76 above its mean. Figure 3b plots the distribution of bridging by CPP-NPA control. The econometric analysis is designed to interrogate the theory’s proposed conditional relationship between bridging and communist control.

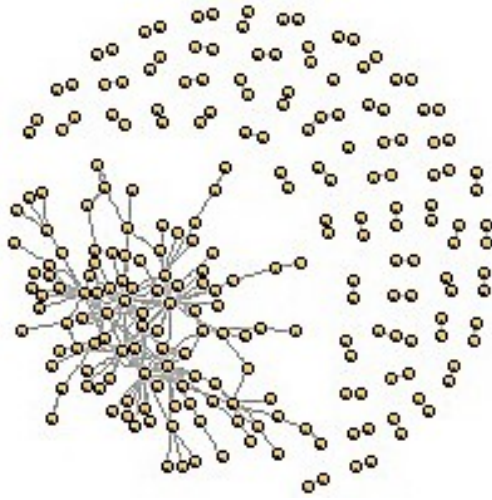
The NHTS conducted a full census only in municipalities with estimated poverty incidence above 50%, 710 total, and conducted a partial census in the remainder. Villages in the complete census are poorer, closer to dense forests, and in municipalities with lower quality governance, more rugged terrain, further from the provincial capital and, crucially, a higher

1993, Jackson, Rodriguez-Barraquer and Tan 2012, Siegel 2009), including protest, revolution, and conflict situations (Chwe 2000, Larson and Lewis 2018). Cruz, Labonne and Querubin (2017) and Cruz (2019) show networks drawn from the NHTS influence voting behavior, election outcomes, and vote-buying strategies, through mechanisms that parallel those advanced here.

¹⁷Modularity is calculated using the *igraph* package in R, <http://igraph.org/r/doc/modularity.igraph.html>, which uses the algorithm proposed in Clauset, Newman and Moore (2004).

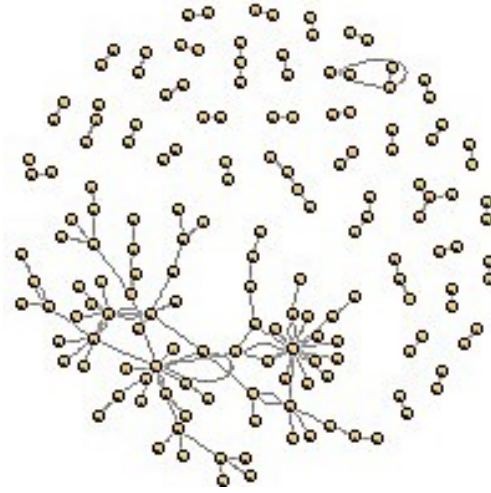
Figure 2: Barangay Network Examples

(a) Nueva Garcia, Loreto, Agusan del Sur



Bridging: 0.907

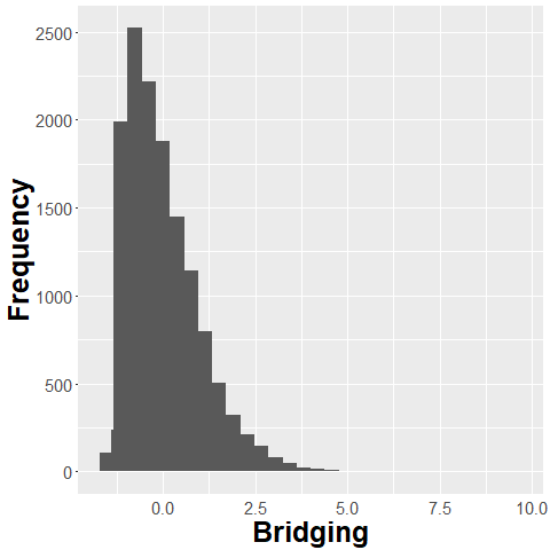
(b) Caranglaan, Mabini, Pangasinan



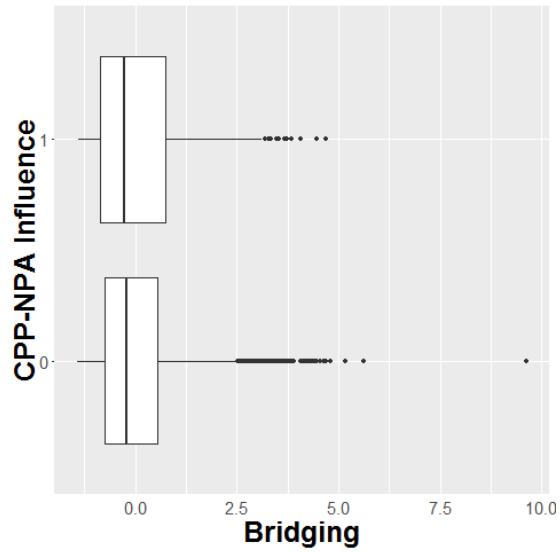
Bridging: 0.631

Figure 3: Bridging Summary Statistics

(a) Bridging



(b) Bridging by CPP-NPA Influence



proportion of communist-controlled villages.¹⁸ In the main analysis, I restrict the sample to full-census villages to retain reliable measures from complete village networks. Though

¹⁸For more details, see the Appendix Section A.1.4, including the covariate balance (Table 3), and Fernandez (2012).

it limits generalizability, this sample of villages at higher risk of rebel control is of greatest relevance for the theory emphasizing community collective action capacity, which is designed to complement existing research by explaining variation in territorial control within areas in which structural predictors suggest rebel territorial control is feasible. Understanding conflict processes within the periphery is essential to explaining protracted civil conflict. Furthermore, the results are consistent in robustness checks using the full sample of full and partial census villages, in which community networks are constructed using only the population of poor households.¹⁹

4.1.3 Local Government Performance

Figure 4: GGI 2005 Summary Statistics

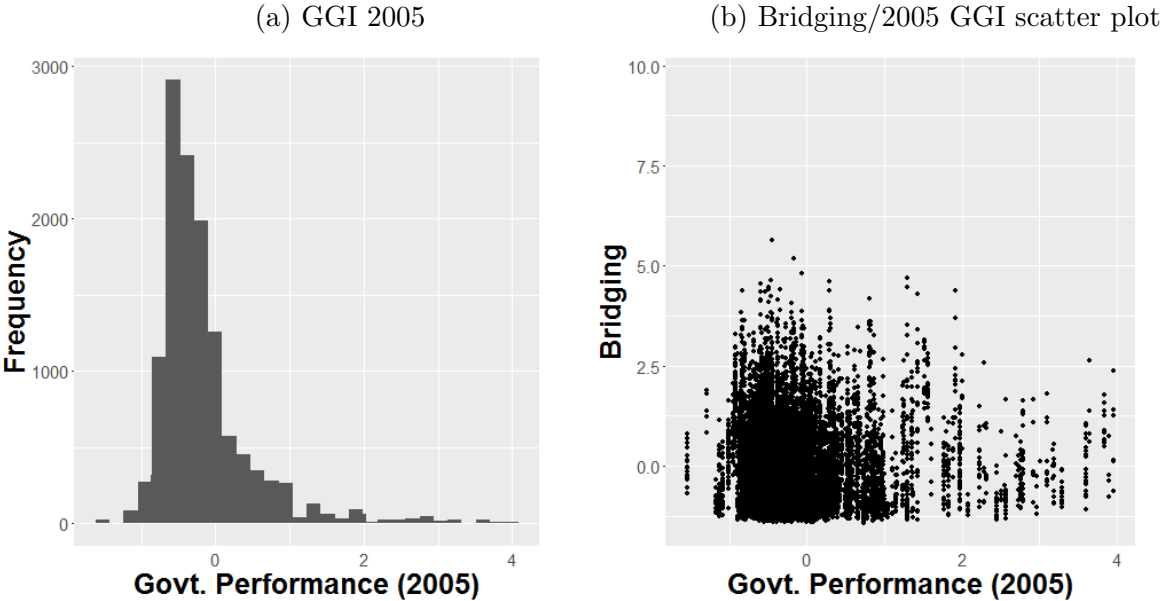


Figure 4a: plots the distribution of the GGI 2005 score in the sample. Figure 4b: scatter plot representing the correlation between bridging statistic and the GGI 2005 score in the sample.

The Government of the Philippines Good Governance Index (GGI), which aggregates indicators of Local Government Unit (LGU) performance on economic, political, and ad-

¹⁹See Appendix Section A.9.

ministrative dimensions, measures the moderating effect of community outside options.²⁰ Figure 4 plots the distribution of the 2005 GGI in the sample and its correlation with village network bridging. Crucial to investigating the conditional effect of collective action capacity, there is substantial overlap between bridging and GGI across the range of both variables (common support). The government did not assess GGI in “highly urbanized cities,” so the sample drops 26 (4%) of 595 full-census municipalities (929 of 13479 villages, 7%). As noted above, there is theoretical justification for focusing on contested territory in the periphery.

4.1.4 Confounders

The regression analysis includes covariate adjustment for potential confounders correlated with community network structure and rebel control. I include the network size (number of families in the village) and network density, the number of observed intermarriages as a percentage of all possible family connections, which affect the community’s division into distinct groups and the distribution of ties within and across groups. Communities with close kinship ties to dynastic political families, which serially occupy top municipality government positions, may retain greater access to government services and reinforce political alignment with the government, reducing insurgent presence. I control for the percentage of family members with close kinship ties to politicians that held public office at any point between 1988-2010, using Cruz, Labonne and Querubin (2017) replication data. I also control for poverty incidence. Communist political and insurgent operatives target poor communities with recruitment efforts. Poverty increases community members’ alignment with the communists and reduces opportunity costs associated with supporting insurgency.²¹

²⁰The GGI incorporates indicators of financial resource management, poverty alleviation, rule of law and administration of justice, security and public safety, political participation, and delivery of services such as health, education, and electricity. For more details, see the Appendix and <http://nap.psa.gov.ph/ggi/techNotes.asp>.

²¹I do not include other development indicators from the census (dwelling construction materials, water access, electricity access, tenure status, health and education) because these components are aggregated

The municipality’s distance to the provincial capital, an urbanized center typically with greater service provision and police headquarters, controls for the state’s cost to projecting power to the village. As in many civil war contexts, the CPP-NPA insurgents seek territorial concealment in heavily forested and mountainous areas. I use geo-referenced Land Cover data to calculate the distance in kilometers between each village’s centroid and the edge of the closest densely forested area.²² I measure terrain roughness using NASA’s Shuttle Radar Topography Mission (SRTM) data covering the topography of the Philippines.²³ Because rebel control is heavily spatially dependent, I control for the percentage of other villages in the municipality exposed to communist control in the period.

4.2 Model Specification

To test Hypothesis 1, I investigate the correlation between community bridging and insurgent territorial control in a regression framework.²⁴ Because the predictors are time-invariant, I collapse the yearly observations of communist insurgent control into a dichotomous measure for whether insurgent control occurred during at least one of the observed years. To adjust coefficient and standard error estimate for administrative unit- and geographic-specific effects spatial clustering in the data-generating process, I fit a multilevel logit model with Province-varying intercepts (Gelman and Hill 2006). To investigate the hypothesized conditional relationship between rebel control and collective action capacity, I include an interaction

to designate household poverty status. Including the component indicators introduces collinearity. In the Appendix, I investigate possible collinearity between local government performance and poverty incidence and dynastic connections that could bias estimates, finding little cause for concern.

²²For villages with dense forests within their borders, the distance is 0.

²³I calculate distances and the terrain ruggedness score using *rgdal*, *rgeos*, *raster* and *sp* packages in R. Clipped Land Cover, and SRTM data for the Philippines were downloaded from the PhilGIS project website: <http://philgis.org/>.

²⁴Due to space constraints, I report the results from the preferred multilevel logit specifications in the main text and report robustness checks across a variety of model specifications in the Appendix.

between bridging and the government performance moderating variable.

Model 1. $C_{ijk} \sim \text{logit}^{-1}(\alpha_{k[i]} + \tau B_{ijk} + \rho G_{jk} + \kappa B_{ijk} * G_{jk} + \mathbf{X}_{ijk}\beta + \mathbf{W}_{jk}\delta, \sigma_C^2),$
 $\alpha_{k[i]} \sim N(0, \sigma_\alpha^2),$

where C_{ijk} is the dichotomous indicator for whether the village is under communist insurgent control (at least “less-influenced”) during at least one of the observed years in the panel, B_{ijk} is the village network bridging measure, and G_{jk} the municipality governance measure in village i , municipality j , and Province k . τ and ρ represent the estimated coefficient on B_{ijk} and G_{jk} , respectively, and κ represents the coefficient on the interaction term. σ_C^2 represents the the unmeasured error in the distribution of village-level CPP-NPA influence. \mathbf{X} is a matrix of village-level covariates, including network size and density, distance to dense forests, politician connections, and poverty incidence; β is the vector of coefficients. \mathbf{W} is a matrix of municipality-level covariates, including distance to the provincial capital, terrain, and insurgent presence; δ is the vector of coefficients. All predictors are standardized.²⁵ α_k and σ_α^2 represent the province-specific intercept and variance, respectively.

Model 1 assumes the effect of bridging changes linearly over the range of government performance. Following Hainmueller, Mummolo and Xu (2018), I fit a fixed-effects model and relax the linear conditional marginal effect assumption. The results, reported in the Appendix, suggest the linearity assumption may be reasonable in this case and yields consistent results, though with attenuated effect magnitude and greater uncertainty due to model complexity.²⁶

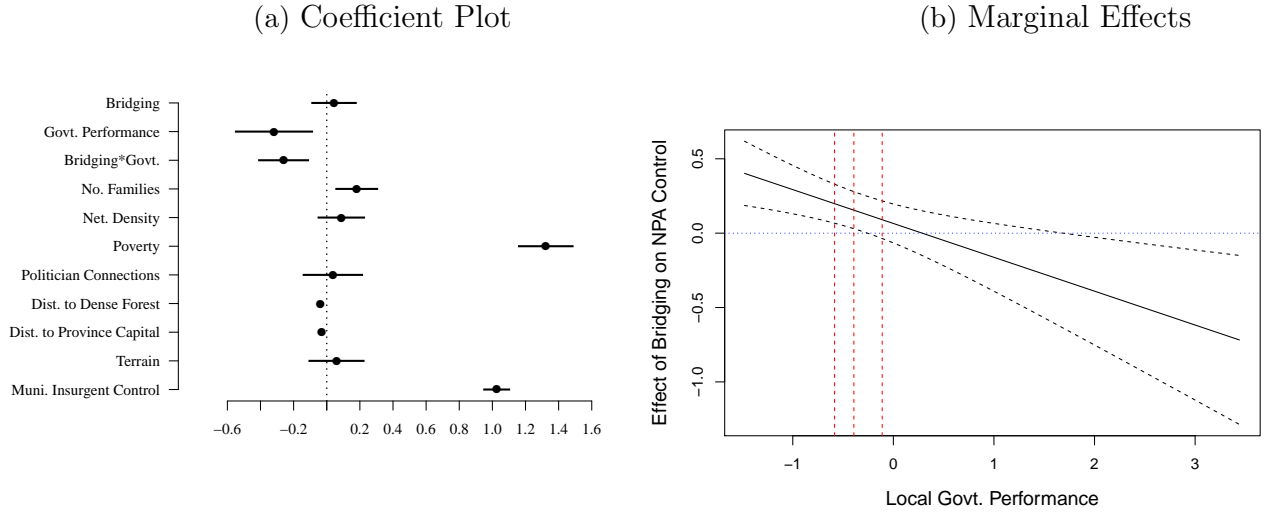
4.3 Results

Figure 5 reports the results from Model 1. Assessing the coefficient estimates (Figure 5a) in light of the hypothesis requires caution, and coefficient magnitudes on bridging and gov-

²⁵One-unit changes in most raw variables are substantively insignificant.

²⁶See Appendix Section A.4. Results from an alternative, varying slope, specification are reported in Appendix Section A.5.

Figure 5: Model 1 Results



Sample	Outcome Variable	Model Fit
N (Villages): 12347	· 1: Influence ≥ 2	Deviance: 3378.08
Municipalities: 567	· 0: Influence < 2	AIC: 3527.51
Provinces: 56		DIC: 3254.64

Figure 6: Model 1 Predicted Probabilities

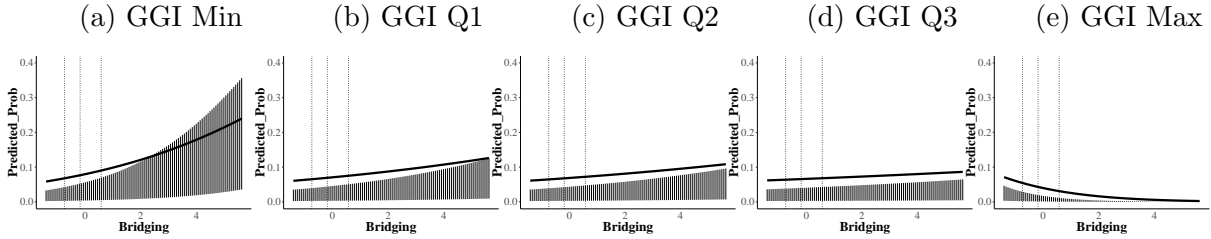


Figure 6: Plots the change in predicted probability of CPP-NPA control over the range of the bridging score for the villages at select levels of local government performance. All other covariates are held at the values observed in the data at the specific bridging score. Thick solid lines represent the average marginal probability (averaged over all municipalities). Vertical solid lines plot the middle 50% of municipality-specific predicted probabilities at the given value of bridging. Vertical dashed lines represent the 25th, 50th, and 75th percentile of the bridging score.

ernment performance are not directly comparable to the coefficients on confounders. The bridging coefficient represents its effect on rebel control when the standardized government performance is 0, which is not the minimum government performance but rather a score at the center of the distribution (0 standard deviations from the mean). Therefore, it is

consistent with the theory that the coefficient estimate on the bridging score is near, and not statistically distinguishable from, 0.

To assess the hypothesis, Figure 5b reports the marginal effect of bridging on insurgent control over the range of government performance. Consistent with Hypothesis 1, the effect of bridging is positive, with greatest magnitude, at lowest levels of government performance, and the effect declines and reverses direction as government performance increases. Because coefficient estimates in a logit model are not interpretable as substantive effects, Figure 6 plots the change in predicted probability of communist control as bridging increases, holding the local government performance at select intervals and holding all other variables at their observed values. The probability of NPA control *increases* substantially in bridging at the lowest level of local government performance. The slope of this positive trend decreases incrementally moving to the first, second, and third quartile of local government performance, with the relationship nearly flat by the latter. At the highest levels of local government performance, the probability of NPA control decreases in bridging.

At first glance, the effect of bridging may appear substantively insignificant. Figure 5b reveals uncertainty over the effect of bridging at higher levels of government performance, and the changes in the predicted probability of rebel control associated with variation in bridging (Figure 6) appear modest. However, recall the sample excludes urbanized municipalities that likely experience higher levels of government service provision. The attenuation bias associated with the truncated sample suggests that the effect sizes may be lower bounds on the effect of bridging on rebel control. Furthermore, village-level bridging exhibits huge variance in the sample: 1.44 standard deviations below to 9.76 above its mean. Comparisons across villages with substantial differences in bridging are substantively relevant. In addition, because CPP-NPA control is so rare (2.27% of village-years) while the costs of conflict are so high, even slight changes in the probability of rebel control are consequential. Despite the fact that the baseline probability of NPA territorial control is lower in areas with highest government performance, where floor effects make it more difficult to confirm

the reversal in the effect’s direction, the probability of NPA control nevertheless decreases in bridging at high GGI scores. I discuss the substantive effects of bridging in greater depth in Appendix.²⁷ Overall, the data suggest that collective action capacity may, in fact, have substantial explanatory power, and may represent an important predictor omitted from most previous studies.

4.4 Limitations

Data limitations require caution regarding the inferences drawn from the analysis. First, family network structure may be endogenous to prior conflict exposure; conflict may sow new divisions in the community and encourage flight to communities where they have family ties. A number of characteristics of the case reduce these concerns. Clans are deeply embedded in local history prior to the communist insurgency. The pressures of conflict may reinforce clan rivalries, as described in [Kalyvas \(2006\)](#), but conflict exposure is unlikely to break the power of family ties. Interview respondents also suggest local social structures underlying collective action influence subsequent rebel decisions whether and how to seek territorial control, supporting an independent effect for community collective action capacity. Displaced households often return after violence has subsided to protect the ancestral home and economic assets, and norms governing intermarriage are slow to change. These dynamics reduce, but cannot eliminate definitively, the possibility of endogeneity bias.

Local government performance may be endogenous to either or both collective action capacity and prior rebel control. In fact, the theory implies this relationship. Because collective action capacity empowers communities to hold the government accountable, it may lead to better government services. This relationship violates the independence assumption underlying the causal interpretation of the conditional marginal effect. Nevertheless, as noted there is substantial variation in bridging across the range of government performance ([Figure 4b](#)). The weak correlation between community bridging and government performance

²⁷Appendix Section A.3.

is consistent with political history of the Philippines and other Southeast Asian countries that emphasize how local tribes or sultanates jealously guard independence from central state-builders (Abinales and Amoroso 2005, Scott 2009). This empirical pattern therefore reduces the concern that government performance is driven entirely by community capacity to bargain for greater government service provision, but does not eliminate the possibility that the independence assumption may be violated.

Similarly, the government may be more constrained in delivering services to areas previously controlled by insurgents. The state's efforts to improve governance in historically conflict-affected regions imply that local government performance is not entirely determined by its endogeneity to community cohesion or conflict history. The appendix reports consistent results using alternative, plausibly exogenous, measures of communities' outside options, drawing upon indicators of state penetration from the 2000 census.

4.5 Generalizability

The Philippines communist insurgency provides leverage to study the general phenomenon of territorial control in irregular civil wars. Like many conflict-plagued countries, the Philippines remains a weak state with developing urban centers while state-building lags in the largely rural periphery. Inferences drawn from this case apply most directly to communist insurgencies; including ongoing conflicts in India and Colombia. Despite differences in political philosophies, the conclusions may also generalize to other revolutionary groups; for example, anti-authoritarian movements (e.g. Free Syria Army) and politicized identity or religious insurgencies (e.g. Taliban, ISIS), which Kalyvas (2015) argues share many similarities with communist and other revolutionary groups. These groups similarly pursue political objectives by competing for territorial control and popular support.

Generalizing the theory to ethno-nationalist conflicts requires further research. Marginalized groups may lack viable options to collaborate with the state, an essential component to the theory. However, political allegiances are remarkably fluid even in ethno-nationalist

conflicts: communities may choose to align with a state dominated by non-coethnics, especially if security under the state exceeds that expected under coethnic rebels (Kalyvas 2006, 2008, Staniland 2012a). For example, Souleimanov and Siroky (2016) find that, in response to civilian-targeted counterinsurgent violence in their communities, Chechen villagers often mobilized collective action to pressure co-ethnic Chechen insurgents to refrain from attacking Russian troops or to defect by aligning with pro-Russian Chechen militias.

Given the peculiar history of family names in post-colonial Philippines, the particular measurement strategy may not travel to other contexts. Nevertheless, the importance of kinship networks to collective action is by no means unique to the Philippines. In fact, relationships between family groups are central to a variety of conflicts from Spain and Greece to Iraq and Afghanistan (Kalyvas 2006, p. 179-180).

5 Do Civilians Influence Governance Costs?

Does community collective action capacity influence rebel territorial control by increasing community bargaining power to demand investment in governance? Though not a formal empirical test, I draw upon interviews with select village elders from three conflict-affected provinces in Eastern Mindanao,²⁸ designed to reconstruct the history of community-NPA interactions, to illustrate the civilian agency mechanism. I also consider two plausible alternative explanations: 1) prior rebel presence may affect both subsequent rebel control *and* community collective action capacity (endogenous collective action capacity); and 2) collective action capacity may increase rebel control through predatory means.²⁹

Consistent with the theory, respondents asserted that NPA personnel relied on pre-

²⁸75 Villages were selected using a cluster random sampling procedure within the sampling frame of Agusan del Sur, Compostela Valley, and Davao Oriental. Trained enumerators conducted semi-structured interviews. The appendix includes additional details.

²⁹Due to space constraints, I present illustrative examples from select village cases; for additional analysis, see [Author Cite Removed].

existing local structures facilitating collective action to secure territorial control. The NPA often depended heavily on the local *datu*'s collaboration to mobilize support throughout the community. Because tribal institutions have deep historical roots, their role is not endogenous to conflict dynamics.

Respondent: *You see when a datu is convinced to join, he brings the members of his clan with him... that's how the NPA recruits. They don't try to convince many people... they just befriend the datu...*³⁰

Pre-existing social structures also facilitate efforts to hold NPA personnel accountable to community interests, rather than enabling NPA coercive control, and affects rebels' investment in territorial control.

Respondent: *They [reject the NPA] together also. That made the NPA very angry... [The villagers] joined the CAFGU [government-funded civilian protection units].*³¹

Consistent with the theory's emphasis on the advantages associated with territorial control in high collective action capacity communities, pre-existing structures streamlined regular collection of revolutionary taxes from the population and enhanced monitoring to protect NPA operatives (population concealment). Moreover, additional social structures beyond tribal institutions, for example professional associations and cooperatives, represent alternative foundations underlying collective action capacity.

Enumerator: Did the residents here have an influence over the NPA?

Respondent: *Oh, yes. We were organized into associations. Then they would assign people roles and functions. Like, some would get assigned to be the collector of the revolutionary taxes. Others were tasked to register the associations with government entities or to partner with NGOs. ... When the soldiers arrived here, it would not be long before the NPA would be told about it... It was impossible I think for them to be caught by surprise.*³²

³⁰Binicalan, San Luis, Agusan del Sur Interview, pgs. 7-8.

³¹Binicalan Interview, pgs. 7-8.

³²Baylo, Monkayo, Compostela Valley Interview, pg. 3.

Respondent: *Every family gave one sardine can of rice and five pesos [monthly]... There were officials... assigned to collect. All the puroks [neighborhoods] had contact persons. Wherever they went here they were safe because they had people everywhere.*

Enumerator: Who determined how much each family would give?

Respondent: *We did. There was a [Farmers Organization] meeting where it was decided...*³³

The interviews also support the mechanism of community accountability enforcement. The respondents above recounted community responses to NPA transgressions, for example in the form of joining state-funded civil protection units, and identify communities leveraging collective action capacity as bargaining power. Community resistance is often as simple as providing information to the government, suggesting that the costs associated with holding rebels accountable may be fairly low. In extreme cases, communities mobilize armed resistance themselves, commonly in response to NPA assassinations of community leaders.

Respondent: *Our barangay captain at Aginaldo... was murdered. That eventually caused the people of Aginaldo to revolt against [the NPA]... carrying with them deadly bolos [machete]... No NPA confronted us because we were so many.*³⁴

6 Conclusion

This article contributes a civilian agency theory to explain the distribution of territorial control during civil wars: community collective action capacity increases rebel control in areas lacking state services, but deters rebel control in areas under state protection and service provision. The theory complements existing arguments based on military capabilities, economic incentives, geographic characteristics, and civilians' political *interests* by emphasizing the importance of civilian *capabilities* for collective action in shaping conflict processes. Regression analysis of unique village-level data suggests that, in the Philippines communist

³³Casoon, Monkayo Interview.

³⁴Kikomay, Laak, Compostela Valley Interview, pgs. 3-4.

insurgency, community collective action capacity plays a substantively significant role in explaining variation in rebel territorial control.

The findings build upon a burgeoning literature emphasizing civilian agency in conflict processes by highlighting the role civilians play in shaping where belligerents operate in the first place. Because the distribution of territorial control influences subsequent conflict processes, the findings motivate revisiting existing explanations for the scale and form of political violence, rebel and state governance, and other conduct in civil war, as well as their effects on the prospects for post-war peace and economic development. Omitting community collective action capacity from analyses may have consequences for the validity of inferences, at least under conditions of weak state presence.

Future research is required to generalize to other cases and types of conflict by testing the theory's implications in other communist insurgencies and revolutions based on other political ideologies. Exploring the parallels and differences in the processes by which communist, jihadi, and other revolutionary organizations establish territorial control offers a promising direction to inform a broader understanding of civil war. The theory emphasizes community interest in security and governance, but partisanship—ideological or identity-based alignment with the government or the rebels—also motivates civilians in war. Such allegiance may influence communities' willingness or ability to align with certain belligerents, affecting their outside options and thus the relationship between collective action capacity and territorial control. Civilians in ethno-nationalist conflicts, in particular, may be less inclined to support non-coethnic belligerents. Future research may investigate how material and partisan interests interact to shape the relationship between collective action capacity and belligerent territorial control.

The argument implies a complex relationship between collective action capacity, state presence, and rebel territorial control. Data limitations in the present study prevent isolating the exogenous sources of collective action and state presence from each other and from prior rebel control for precise causal identification. Future work may build on this article by

exploiting exogenous sources of variation in collective action capacity and local government performance, in the Philippines or other contexts, to subject the theory to further empirical scrutiny.

The findings suggest “hearts and minds” counterinsurgency strategies, designed to win public support by influencing civilians’ *interests* to align with the government, should also incorporate assessments regarding civilians’ *capabilities* to act upon those interests. Interventions to win over popular support may yield lackluster operational and strategic results if implemented in communities that lack the ability to act collectively, and may yield more sustainable successes in areas that do possess collective action capacity. Furthermore, the role of the state-as-outside option moderating variable suggests that counterinsurgency requires credible commitments to maintain protection and service delivery indefinitely. Significant investments in state-building may be necessary to achieve even short-term operational goals to eliminate rebel control in contested territory. Community-driven development (CDD) programs—designed to build local capacity for self-governance as a bulwark against insurgency expansion—may prove ineffective or counterproductive if implemented prior to, or as a substitute for, investment in durable state presence.

References

- Abinales, Patricio N and Donna J Amoroso. 2005. *State and Society in the Philippines*. Rowman & Littlefield Publishers.
- Arjona, Ana. 2015. Civilian Resistance to Rebel Governance. In *Rebel Governance in Civil War*, ed. Ana Arjona, Nelson Kasfir and Zachariah Mampilly. New York, NY: Cambridge University Press chapter 1, pp. 1–20.
- Arjona, Ana. 2016. *Rebelocracy: Social Order in the Colombian Civil War*. New York, NY: Cambridge University Press.
- Arjona, Ana, Nelson Kasfir and Zachariah Mampilly. 2015. *Rebel Governance in Civil War*. New York, NY: Cambridge University Press.
- Balcells, Laia. 2017. *Rivalry and Revenge*. Cambridge University Press.
- Berman, Eli, Jacob N Shapiro and Joseph H Felter. 2011. “Can Hearts and Minds be Bought? The Economics of Counterinsurgency in Iraq.” *Journal of Political Economy* 119(4):766–819.
- Berman, Eli, Joseph Felter, Ethan Kapstein and Erin Troland. 2013. Predation, taxation, investment and violence: evidence from the Philippines. Technical report National Bureau of Economic Research.
- Berman, Eli, Michael Callen, Joseph H Felter and Jacob N Shapiro. 2011. “Do Working Men Rebel? Insurgency and Unemployment in Afghanistan, Iraq, and the Philippines.” *Journal of Conflict Resolution* 55(4):496–528.
- Boulding, Kenneth E. 1962. *Conflict and Defense: A General Theory*. Harper & Row.
- Buhaug, Halvard. 2010. “Dude, Where’s My Conflict? LSG, Relative Strength, and the Location of Civil War.” *Conflict Management and Peace Science* 27(2):107–128.
- Buhaug, Halvard, Lars-Erik Cederman and Jan Ketil Rød. 2008. “Disaggregating ethnonationalist civil wars: A dyadic test of exclusion theory.” *International Organization* pp. 531–551.
- Buhaug, Halvard, Scott Gates and Päivi Lujala. 2009. “Geography, Rebel Capability, and the Duration of Civil Conflict.” *Journal of Conflict Resolution* 53(4):544–569.
- Cederman, Lars-Erik, Nils B Weidmann and Kristian Skrede Gleditsch. 2011. “Horizontal Inequalities and Ethnonationalist Civil War: A Global Comparison.” *American Political Science Review* 105(03):478–495.
- Chwe, Michael Suk-Young. 1999. “Structure and strategy in collective action.” *American journal of sociology* 105(1):128–156.
- Chwe, Michael Suk-Young. 2000. “Communication and coordination in social networks.” *The Review of Economic Studies* 67(1):1–16.

- Clauset, Aaron, Mark EJ Newman and Cristopher Moore. 2004. "Finding community structure in very large networks." *Physical review E* 70(6):066111.
- Collier, Paul and Anke Hoeffler. 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56(4):563–595.
- Condra, Luke N and Jacob N Shapiro. 2012. "Who Takes the Blame? The Strategic Effects of Collateral Damage." *American Journal of Political Science* 56(1):167–187.
- Corpuz, Onofre D. 1965. *The Philippines*. Prentice-Hall, Inc.
- Crost, Benjamin, Joseph Felter and Patrick Johnston. 2014. "Aid Under Fire: Development Projects and Civil Conflict." *The American Economic Review* 104(6):1833–1856.
- Cruz, Cesi. 2019. "Social Networks and the Targeting of Vote Buying." *Comparative Political Studies* 52(3):382–411.
- Cruz, Cesi, Julien Labonne and Pablo Querubin. 2017. "Politician family networks and electoral outcomes: Evidence from the Philippines." *American Economic Review* 107(10):3006–37.
- Cullinane, Michael. 1998. Accounting for Souls: Ecclesiastical Sources for the Study of Philippines Demographic History. In *Population and History: The Demographic Origins of the Modern Philippines*, ed. Daniel F. Doepfers and Peter Xenos. Manila: Ateneo de Manila Press chapter 10, pp. 281–346.
- Dube, Oeindrila and Juan F Vargas. 2013. "Commodity price shocks and civil conflict: Evidence from Colombia." *The Review of Economic Studies* 80(4):1384–1421.
- Fearon, James D and David D Laitin. 1996. "Explaining interethnic cooperation." *American political science review* 90(04):715–735.
- Fearon, James D and David D Laitin. 2003. "Ethnicity, Insurgency, and Civil War." *American Political Science Review* 97(1):75–90.
- Felter, Joseph H. 2005. Taking guns to a knife fight: a case for empirical study of counterinsurgency PhD thesis Stanford University.
- Fernandez, Luisa. 2012. "Design and Implementation Features of the National Household Targeting System in the Philippines."
- Fortna, Virginia Page, Nicholas J Lotito and Michael A Rubin. 2018. "Don't Bite the Hand that Feeds: Rebel Funding Sources and the Use of Terrorism in Civil Wars." *International Studies Quarterly* .
- Galula, David. 2006 [1964]. *Counterinsurgency Warfare: Theory and Practice*. Greenwood Publishing Group.
- Gelman, Andrew and Jennifer Hill. 2006. *Data analysis using regression and multi-level/hierarchical models*. Cambridge University Press.

- Gould, Roger V. 1993. "Collective action and network structure." *American Sociological Review* pp. 182–196.
- Gubler, Joshua R and Joel Sawat Selway. 2012. "Horizontal inequality, crosscutting cleavages, and civil war." *Journal of Conflict Resolution* 56(2):206–232.
- Guevara, Che. 2002 [1961]. *Guerrilla warfare*. Rowman & Littlefield Publishers.
- Gurr, Ted R. 1970. *Why Men Rebel*. Princeton University Press.
- Habyarimana, James, Macartan Humphreys, Daniel N Posner and Jeremy M Weinstein. 2009. *Coethnicity: Diversity and the Dilemmas of Collective Action: Diversity and the Dilemmas of Collective Action*. Russell Sage Foundation.
- Hainmueller, Jens, Jonathan Mummolo and Yiqing Xu. 2018. "How much should we trust estimates from multiplicative interaction models? Simple tools to improve empirical practice." *Political Analysis* .
- Hirose, Kentaro, Kosuke Imai and Jason Lyall. 2017. "Can civilian attitudes predict insurgent violence? Ideology and insurgent tactical choice in civil war." *Journal of peace research* 54(1):47–63.
- Holtermann, Helge. 2016. "Relative Capacity and the Spread of Rebellion: Insights from Nepal." *Journal of Conflict Resolution* 60(3):501–529.
- Horowitz, Donald L. 1985. *Ethnic Groups in Conflict*. University of California Press.
- Humphreys, Macartan. 2005. "Natural resources, conflict, and conflict resolution: Uncovering the mechanisms." *Journal of conflict resolution* 49(4):508–537.
- Humphreys, Macartan and Jeremy M Weinstein. 2006. "Handling and manhandling civilians in civil war." *American Political Science Review* 100(3):429.
- Humphreys, Macartan and Jeremy M Weinstein. 2008. "Who fights? The determinants of participation in civil war." *American Journal of Political Science* 52(2):436–455.
- Jackson, Matthew O, Tomas Rodriguez-Barraquer and Xu Tan. 2012. "Social capital and social quilts: Network patterns of favor exchange." *The American Economic Review* 102(5):1857–1897.
- Kalyvas, Stathis. 2006. *The Logic of Violence in Civil War*. Cambridge Studies in Comparative Politics, Cambridge University Press.
- Kalyvas, Stathis N. 2008. "Ethnic defection in civil war." *Comparative Political Studies* 41(8):1043–1068.
- Kalyvas, Stathis N. 2012. "Micro-level studies of violence in civil war: Refining and extending the control-collaboration model." *Terrorism and Political Violence* 24(4):658–668.

- Kalyvas, Stathis N. 2015. "Is ISIS a Revolutionary group and if Yes, What are the Implications?" *Perspectives on Terrorism* 9(4):42–47.
- Kaplan, Oliver. 2017. *Resisting War: How Communities Protect Themselves*. Cambridge University Press.
- Kasfir, Nelson. 2015. Rebel Governance – Constructing a Field of Inquiry: Definitions, Scope, Patterns, Order, Causes. In *Rebel Governance in Civil War*, ed. Ana Arjona, Nelson Kasfir and Zachariah Mampilly. New York, NY: Cambridge University Press chapter 2, pp. 21–46.
- Kessler, Richard J. 1989. *Rebellion and Repression in the Philippines*. Yale University Press.
- Larson, Jennifer M and Janet I Lewis. 2018. "Rumors, kinship networks, and rebel group formation." *International Organization* pp. 1–33.
- Le Billon, Philippe. 2001. "The political ecology of war: natural resources and armed conflicts." *Political geography* 20(5):561–584.
- Mampilly, Zachariah Cherian. 2011. *Rebel rulers: Insurgent governance and civilian life during war*. Cornell University Press.
- Mao, Tse-Tung, translated by Samuel B Griffith. 2007 [1937]. *On Guerrilla Warfare*. BN Publishing.
- McCoy, Alfred W. 1993. *An anarchy of families: State and family in the Philippines*. University of Wisconsin Press.
- Morelli, Massimo and Dominic Rohner. 2015. "Resource concentration and civil wars." *Journal of Development Economics* 117:32–47.
- Nagl, John A, James F Amos, Sarah Sewall, David H Petraeus et al. 2008. *US Army/Marine Corps Counterinsurgency Field Manual: 3-24*. University of Chicago Press.
- Nielsen, Richard A, Michael G Findley, Zachary S Davis, Tara Candland and Daniel L Nielson. 2011. "Foreign aid shocks as a cause of violent armed conflict." *American Journal of Political Science* 55(2):219–232.
- Nunn, Nathan and Nancy Qian. 2014. "US food aid and civil conflict." *The American Economic Review* 104(6):1630–1666.
- Ober, Josiah. 2008. *Democracy and knowledge: Innovation and learning in classical Athens*. Princeton University Press.
- Ostrom, Elinor. 1990. *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.
- Ostrom, Elinor. 2000. "Social capital: a fad or a fundamental concept." *Social capital: A multifaceted perspective* 172(173):195–98.

- Parkinson, Sarah Elizabeth. 2013. "Organizing rebellion: Rethinking high-risk mobilization and social networks in war." *American Political Science Review* 107(03):418–432.
- Petersen, Roger D. 2001. *Resistance and rebellion: lessons from Eastern Europe*. Cambridge University Press.
- Putnam, Robert D. 2001. *Bowling alone: The collapse and revival of American community*. Simon and Schuster.
- Putnam, Robert D, Robert Leonardi and Raffaella Y Nanetti. 1994. *Making democracy work: Civic traditions in modern Italy*. Princeton university press.
- Race, Jeffrey. 1973. *War comes to Long An: Revolutionary conflict in a Vietnamese province*. Univ of California Press.
- Risse, Thomas. 2012. Governance in Areas of Limited Statehood. In *The Oxford Handbook of Governance*, ed. David Levi-Faur. pp. 699–715.
- Santos, Soliman M, Paz Verdades M Santos, Octavio A Dinampo and Diana Rodriguez. 2010. *Primed and purposeful: Armed groups and human security efforts in the Philippines*. Small Arms Survey, Graduate Institute of International and Development Studies.
- Sarbahi, Anoop K. 2014. "Insurgent-Population Ties and the Variation in the Trajectory of Peripheral Civil Wars." *Comparative Political Studies* On-line First edition.
- Scott, James C. 2009. *The art of not being governed: An anarchist history of upland Southeast Asia*. Yale University Press.
- Sexton, Renard. 2016. "Aid as a tool against insurgency: Evidence from contested and controlled territory in Afghanistan." *American Political Science Review* 110(4):731–749.
- Shaver, Andrew and Jacob Shapiro. forthcoming. "The effect of civilian casualties on wartime informing: Evidence from the Iraq war." *Journal of Conflict Resolution*. .
- Shesterinina, Anastasia. 2016. "Collective Threat Framing and Mobilization in Civil War." *American Political Science Review* 110(3):411–427.
- Siegel, David A. 2009. "Social networks and collective action." *American Journal of Political Science* 53(1):122–138.
- Souleimanov, Emil Aslan and David S Siroky. 2016. "Random or retributive?: Indiscriminate violence in the chechen wars." *World Politics* 68(4):677–712.
- Staniland, Paul. 2012a. "Between a rock and a hard place: Insurgent fratricide, ethnic defection, and the rise of pro-state paramilitaries." *Journal of Conflict Resolution* 56(1):16–40.
- Staniland, Paul. 2012b. "States, Insurgents, and Wartime Political Orders." *Perspectives on Politics* 10(02):243–264.

- Staniland, Paul. 2014. *Networks of Rebellion: Explaining Insurgent Cohesion and Collapse*. Cornell University Press.
- Stewart, Megan A. 2018. "Civil War as State-Making: Strategic Governance in Civil War." *International Organization* 72(1):205–226.
- Tarrow, Sidney. 1994. *Power in movement: Social movements, collective action and mass politics in the modern state*. Cambridge: Cambridge University Press.
- Torres Jr, Ernesto C. 2011. A Success Story of Philippine Counterinsurgency: A Study of Bohol. Technical report DTIC Document.
- Varshney, Ashutosh. 2001. "Ethnic conflict and civil society: India and beyond." *World politics* 53(03):362–398.
- Weinstein, Jeremy M. 2007. *Inside Rebellion*. Cambridge University Press.
- Wickham-Crowley, Timothy P. 1992. *Guerrillas and revolution in Latin America: A comparative study of insurgents and regimes since 1956*. Princeton University Press.
- Wood, Elisabeth Jean. 2003. *Insurgent Collective Action and Civil War in El Salvador*. Cambridge University Press.
- Woolcock, Michael and Deepa Narayan. 2000. "Social capital: Implications for development theory, research, and policy." *The world bank research observer* 15(2):225–249.
- Wucherpennig, Julian, Nils W Metternich, Lars-Erik Cederman and Kristian Skrede Gleditsch. 2012. "Ethnicity, the State, and the Duration of Civil War." *World Politics* 64(01):79–115.