

Here Today, Gone Tomorrow: Dynamics of Peacekeeper Entry and Exit on Violence Against Civilians

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Following the assassination of President Laurent-Désiré Kabila in 2001, the UN deployed a peacekeeping mission to the Democratic Republic of the Congo (DRC) to quell violence against civilians. Mandated to patrol locally and authorized to use force to protect civilians and halt combat, peacekeepers aimed to reduce violence on the ground. However, the mission yielded mixed results. In Djugu, a small city near the Ugandan border, roughly 50 people were killed in six months due to clashes between ethnic militias and targeted attacks on civilians. In response, peacekeepers deployed to the area and remained for nearly three years. Yet violence escalated: approximately 2,200 people were killed during their deployment—an average of 62 deaths per month—largely due to state and state-aligned militia violence. The situation deteriorated further after their withdrawal, with 1,100 deaths in the following six months, averaging 166 fatalities per month.

The presence of UN peacekeepers in Djugu not only affected local violence but also influenced its spread to surrounding areas, including across the Ugandan border. As shown in Figure 1, the geographic distribution of violence changed markedly before, during, and after their deployment. In the six months prior to peacekeepers' arrival, violence was relatively concentrated within Djugu. During their three-year presence, violence persisted in Djugu

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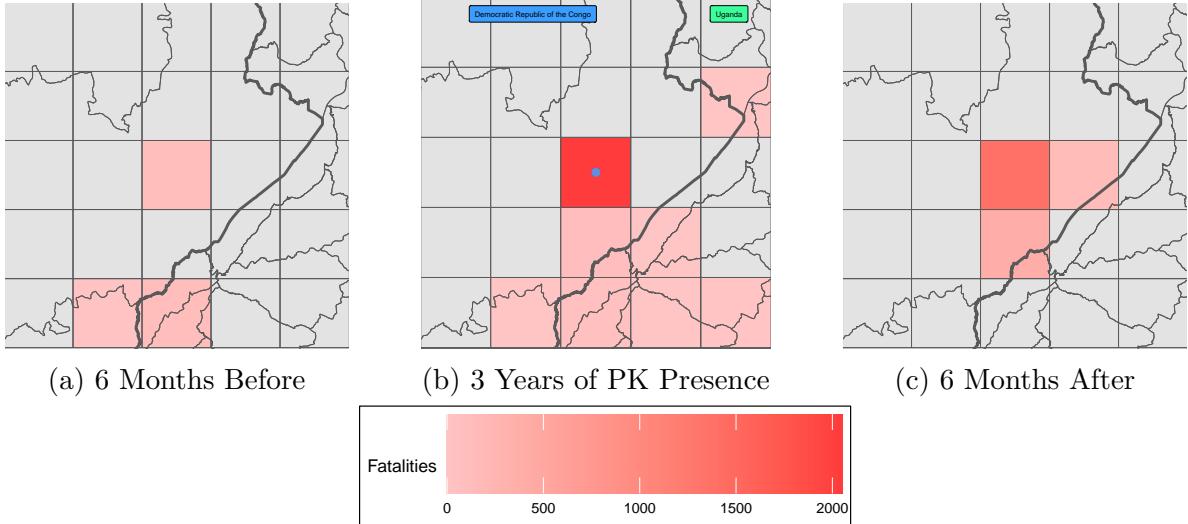


Figure 1: Aggregate violence in the DRC six months before peacekeeper entrance, three years of continued presence, and six months after exit.

and expanded into neighboring regions. Following their withdrawal, violence re-intensified in Djugu, with continued incidents in adjacent areas. What accounts for this temporal and spatial variation across the peacekeeping cycle — arrival, presence, and withdrawal?

While this mission’s ineffectiveness may not surprise critics of the UN, it challenges the expectations of much of the academic literature. Numerous studies have found that peacekeeper presence is associated with reduced fatalities (Walter, Howard, and Fortna 2021), and state-level analyses consistently show that greater peacekeeper deployments correlate with less violence and fewer deaths (Hultman, Kathman, and Shannon 2013; Bara and Hultman 2020). These findings are particularly striking given that peacekeepers are often sent to the most difficult cases (Ruggeri, Dorussen, and Gizelis 2017). However, as the case of Djugu illustrates, state-level studies may overlook critical local dynamics. While such studies are valuable, they may be insufficient to explain subnational variation in violence.

We argue that peacekeeping operations (PKOs) affect the capacity of rebel groups and the government to carry out violence. Their impact depends on their ability to affect the operational capacity (ability to conduct attacks) and organizational capacity (administrative strength) of conflict actors. We contend that peacekeeping reduces both capacities more

effectively for rebels than for the state, shaping patterns of violence against civilians. As rebel capacity declines, state actors may become more empowered to commit violence, particularly in nearby areas.

To test our theory, we use data on all Chapter VII UN PKOs in Africa from 2000-2017 at a 55km² grid-cell level. Using incidents of fine-grained, geolocated violence data within grid-cell-months, we build a complete panel of deployments and violence for Chapter VII missions. Much previous research on peacekeeper effectiveness overlooks subnational, temporal, and geospatial dynamics in the peacekeeping process. While some studies examine localized outcomes of peacekeeper withdrawal (Beber et al. 2019; Karim 2020), none systematically analyze all UN missions in Central and West Africa. Moreover, prior work focuses on overall mission outcomes rather than subnational effects of peacekeeper entry and exit.

To causally identify the effect of PKOs on violence, we use a difference-in-differences research design. Our findings show that peacekeeper presence within a country increases state violence levels locally and in neighboring areas. Then, when peacekeepers leave, we find even greater levels of state violence. We find that rebel group violence is somewhat diminished locally but greatly diminished in neighboring cells. Together, these results suggest that while peacekeepers remain important for reducing nonstate violence, the diminished power of rebels may lead to more violence against civilians by the state. We do not argue against peacekeeper deployment; strong evidence shows they reduce violence at the country level. Rather, our research adds nuance by examining one of several mechanisms influencing violence across time and space during the peacekeeping process.

We contribute to the peacekeeping literature in several ways. First, we offer a novel analysis of whether peacekeepers foster durable subnational peace over the lifespan of an operation, emphasizing their differing impacts on rebel and government violence, and the importance of examining peacekeeper entry and exit. We introduce a theoretical mechanism linking peacekeeper presence to the organizational and operational capacities of conflict actors. We also improve causal identification for questions about where and when peacekeeping

works. Our findings add nuance to existing quantitative research and highlight the need to focus on violence against civilians.

What We Know about Peacekeeping Effectiveness

Existing research on the impact of PKOs has consistently found that peacekeeping is effective. The large-n quantitative and descriptive analyses, however, show the aggregate effectiveness of PKOs. A large body of literature utilizing data at the country-level suggests that the presence of peacekeepers successfully reduces violence (Hultman, Kathman, and Shannon 2014; Carnegie and Mikulaschek 2020). Some research disaggregates the question of effectiveness, finding that the impact of PKOs may be conditional. There is evidence that effective peacekeeping is more difficult to maintain when the government is winning or in identity-based conflicts (Fortna 2008; Costalli 2014; Sandler 2017).

Scholars have also debated how to define peacekeeping success, distinguishing between battlefield violence and violence against civilians. Ruggeri, Dorussen, and Gizelis (2017) find peacekeeping may reduce the duration of episodic violence but not prevent its onset. Hultman, Kathman, and Shannon (2014) show that more UN troops reduce battlefield deaths, while others find local reductions in battlefield violence (Peitz and Reisch 2019). Beardsley, Cunningham, and White (2019) show peacekeeping combined with mediation can reduce violence. Hultman, Kathman, and Shannon (2013) report that more peacekeepers correlate with fewer civilian attacks. However, evidence on reducing sexual violence is mixed and suggests limited effectiveness (Johansson and Hultman 2019).

Another measure of effectiveness is how peacekeeping impacts state versus rebel violence. Carnegie and Mikulaschek (2020) find peacekeepers reduce rebel violence against civilians. Phayal and Prins (2020) argue that peacekeepers respond more to rebel violence, showing reluctance to confront state-perpetrated violence. Similarly, Fjelde, Hultman, and Nilsson (2019) note that while peacekeepers raise costs for rebel attacks, their reliance on state

consent limits deterrence against government violence. Recent evidence also shows that when peacekeepers come from nearby countries, their regional familiarity improves civilian protection (Dworschak and Cil 2022).

Research on peacekeeping effectiveness also raises questions about the impact of withdrawal, though studies remain limited. Dorussen (2015) finds a positive perception of security after withdrawal in Timor Leste. Other work shows that peacekeepers boost local economies, but this effect fades once they leave (Beber et al. 2017). Some studies identify temporal patterns using descriptive data (Di Salvatore 2020; Gledhill 2020), while case studies suggest that peacekeeping may only temporarily halt violence and institutional deterioration (Karim 2020; Kolbe 2020).

There is also some variation in the methodologies used in the quantitative study of peacekeeping. A key distinction in the literature is between country-level and subnational analysis. More studies using fine-grained subnational data are needed to understand local mechanisms. As Walter, Howard, and Fortna (2021, p. 1714) notes, many studies rely on national yearly data that lack sufficient granularity. Recent work using subnational peacekeeper deployment data has advanced understanding of peacekeeping effectiveness (Ruggeri, Dorussen, and Gizelis 2018; Fjelde, Hultman, and Nilsson 2019; Phayal and Prins 2020; Fjelde and Smidt 2022; Reeder, Hendricks, and Goldring 2022).

Building on existing research, we aim to deepen our understanding of the mechanisms through which peacekeepers influence local and subnational violence at the point of entry, exit, and while they are present. In the following section, we synthesize prior findings and present a theoretical framework explaining how peacekeeper effectiveness operates at the local level during both their arrival and withdrawal. We then introduce a novel empirical research design to test our hypotheses.

Mechanisms of Peacekeeping Effectiveness

How does the arrival of peacekeepers shift levels of violence against civilians? What happens after peacekeepers leave? Answering these questions requires an examination of the mechanisms through which peacekeepers shift the capacity and incentives of armed groups and governments to carry out violence.

The dominant logic suggests that peacekeepers, by their very presence, provide belligerents with a third party security guarantee (Walter, Howard, and Fortna 2021). This guarantee gives belligerents confidence that they can put down their guns without imperiling their own survival. Peacekeepers achieve this effect by providing the warring parties with a guarantee of safety and security via deterrence and reporting (Hultman, Kathman, and Shannon 2014).

We argue that the effectiveness of PKOs in diminishing violence against civilians is a function of peacekeepers' influence on the capacities of rebel groups and governments. We further disaggregate into **operational capacity**, based on the ability of the group to carry out violent attacks, and **organizational capacity**, based on the ability of the group to retain and strengthen their administrative potential. We first discuss the impact of peacekeepers on both types of capacity for rebel groups, and then for governments.

Peacekeeping and Rebel Violence against Civilians

First, peacekeepers are able to disrupt the operational capacity of rebel groups via monitoring and geographic containment. PKOs are placed not only in the hardest cases but also in areas where violence is higher, more active, or more likely (Costalli 2014; Ruggeri, Dorussen, and Gizelis 2017; Phayal and Prins 2020). As a result, the PKOs are most likely to go where rebel groups have concentrated resources and capital. Their presence in these areas will have a dampening effect on the amount of violence that rebel groups will be able to undertake, as the observation and monitoring conducted by the PKO, combined with the deterrent threat

of peacekeeper intervention, should limit violent activity. A significant local presence will increase the costs for the rebel group to engage in civilian targeting (Fjelde, Hultman, and Nilsson 2019). PKO deployments generally target areas where rebel groups' resources are most concentrated; however, PKO presence should increase the costs for rebels to engage in civilian targeting even in these areas, thereby limiting the viability of violence. The first hypothesis follows from this logic.

Hypothesis 1a: The arrival of peacekeepers will lead to a decrease in rebel violence against civilians in the immediate area.

We further expect to observe the containment effect documented by Beardsley and Gleditsch (2015), whereby the presence of PKOs reduces the ability of belligerents to move undetected and provides logistical barriers to the conflict spilling over into areas adjacent to the PKO deployment. As such, we argue that PKOs reduce local violence because the armed groups do not have the freedom of movement to carry out violent operations on a wider scale. If the presence of peacekeepers makes it more difficult to carry out violence against civilians in the immediate area, it also makes it more difficult for rebel groups to effectively move from their centers of power toward the periphery. Note that this logic is predicated on peacekeeping bases being placed in or near rebel strongholds. The obstruction of geographic movement due to the presence of the PKO suggests that the rebel group's ability to carry out violence in the periphery will be substantially diminished. The next hypothesis follows:

Hypothesis 1b: The arrival of peacekeepers will lead to a decrease in rebel violence against civilians in neighboring areas.

In addition to the expected reduction in violence as a result of decreased operational capacity, the security guarantee provided by PKOs can reduce the organizational capacity of armed groups. We define organizational capacity as the ability of an armed group to carry out long-term administrative functions and operations related to their viability and existence

as an organization. Monitoring and geographic limitations reduce operational capacity, but we further argue that the presence of a PKO can diminish the organizational or structural capacity of a rebel group. As noted by Weinstein (2007), rebel groups face challenges to their organization and structure that can be detrimental to their survival and capacity if not effectively managed. Viable rebel groups must find effective mechanisms for recruitment and control, as well as develop material resources and a sense of legitimacy. The presence of a PKO impedes a rebel group's ability to conduct the administrative affairs necessary to retain viability. Again, through monitoring and a deterrent threat, peacekeepers impede a rebel group's ability to conduct open operations, including limiting their ability to recruit, coalesce, or even receive support from external actors (Beardsley 2011).

The impact on organizational capacity is associated in large part with the signal that the presence of a PKO sends vis-à-vis the legitimacy of a rebel group. By definition, the presence of a PKO is meant to foster a diminishing effect on rebel group legitimacy. The presence of a third-party security guarantee, such as a PKO, is meant to restore internal authority to the government and diminish the validity of internal claimants to state authority. Often, though not always, PKOs are associated with negotiated settlements, agreements, or other informal arrangements that also signal that rebel groups have ceded some power to legitimate authorities (including the government and third-party guarantors). The monitoring and deterrent effects of a PKO, as well as other pressures that may delegitimize the operations of a rebel group, will over time have a diminishing effect on their ability to exist as an armed group. There may also be other forms of policy and third-party intervention by domestic or third-party actors meant to demobilize the rebel group and civilian populations. Over time, the presence of a PKO should have a delegitimizing effect on the existence of a rebel group in the area. As a result, this can disrupt the rebel group's ability to carry out administrative functions and should diminish the organizational strength and capacity of a rebel group over time.

The ability of PKOs to diminish the rebel groups' organizational capacity is likely em-

pirically indistinguishable from the impact on operational capacity; that is, both forms of capacity diminishment should lead to similar empirical observations. This follows logically, as a focus on a rebel group's diminished organizational capacity would also lead to Hypotheses 1a and 1b.

The true test, then, of the extent to which PKOs are able to diminish the organizational capacity of rebel groups is whether there are lingering effects after the withdrawal of a PKO. Here we distinguish our argument both theoretically and empirically by addressing the impact on violence against civilians after a PKO leaves. If the impact of a PKO is limited to the impact of their direct presence, the withdrawal of a PKO should lead to an increase in violence, if not a full return to pre-deployment levels of violence. If, however, the PKO successfully carries out its mandate to constrain conflict and reduces the long-term organizational capacity of a rebel group, this impact should last after withdrawal. We expect the presence and institutionalization of a PKO to delegitimize a rebel organization, leading to demobilization and a decrease in organizational capacity. As a result of this decreased organizational capacity, rebel groups will not be able to return to violence even after peacekeepers have withdrawn. Hypotheses 2a and 2b follow from this logic.

Hypothesis 2a: The withdrawal of peacekeepers will not increase rebel violence against civilians in the immediate area.

Hypothesis 2b: The withdrawal of peacekeepers will not increase rebel violence against civilians in neighboring areas.

Peacekeeping and Government Violence against Civilians

While the first theoretical mechanism underlying the effectiveness of peacekeepers does not necessarily distinguish between rebel and government violence, empirical research has started to distinguish between how peacekeepers handle rebel and government violence. We argue that PKOs have the potential to have a similar diminishing impact on government's opera-

tional capacity, but this potential impact may not hold in practice due to tensions between the mandate of a PKO and government authority. This distinction, while perhaps running contrary to the logic of peacekeeping missions and their importance in protecting against civilian victimization, does follow naturally from how violence operates in post-civil war environments.

A key factor in understanding the differing impacts of peacekeepers on rebel and government violence is how civilian protection mandates function in practice. As Holt, Taylor, and Kelly (2009) note, military peacekeepers often operate without clear or specific guidelines. In addition, one of the principles of civilian protection under the auspices of the United Nations is the responsibility of governments to protect their civilians (Phayal and Prins 2020). Phayal and Prins (2020, p. 319) observe that the responsibility to work in partnership with host nations, as well as mandate language frequently including the phrase “without prejudice to the responsibility of the state,” likely creates tension within the incentives of the peacekeepers. Fjelde, Hultman, and Nilsson (2019) note that peacekeepers’ access to civilians depends on government consent, limiting their ability to impose military costs on state actors to deter violence. We argue that this lack of operational clarity fosters reluctance to confront government-perpetrated violence. As a result, peacekeepers are less likely to intervene against state abuses, leading to a neutral impact in areas within their immediate reach.

Hypothesis 3a: The arrival of peacekeepers will lead to no change in the government’s violence against civilians in the immediate area.

As mentioned above, we anticipate that when peacekeepers are present, it will alter both the geographic distribution of the members of the rebel group and strengthen the government. However, the presence of the peacekeepers and the resulting geographic containment of the rebel group do not diminish the desire of the rebels to achieve their goals. Because the rebel group has not fully demobilized and the threat to the internal legitimacy of the government is still felt, the government will want to ensure that the rebel group cannot maintain a

long-term foothold, which would enable them to potentially pose a renewed threat to the government in the future. The government, it follows, will continue to seek opportunities to further challenge the rebel group's ability to make internal claims to authority. One key way the government will do this is to target the civilian population that the rebel group relies on as a recruiting base.¹ This is likely a continuation of tactics used by the government before the arrival of a PKO and, as outlined above, may very well be occurring in the areas patrolled by peacekeepers as well. With rebel groups weakened, the state will be able to re-group and rebuild its capacity to suppress and further weaken rebel groups and maintain order within its borders (Beardsley 2011).

As a result of this incentive structure, the spatial impact of peacekeeping deployments on governments should be the inverse of their impact on rebel groups. While the immediate presence of a peacekeeping deployment can lead to the containment of rebel violence, it can also lead to the dispersion of government violence. As governments still feel the threat from the presence of the rebel group, they can continue to be incentivized to target civilian populations and carry out attacks against potential rebel strongholds. This is less likely to occur in the direct presence of peacekeepers, as the government seeks to solidify its claim as the sole proprietor of the legitimate use of force within the country. Moreover, in areas not patrolled by peacekeepers, costs cannot be imposed on the government for violence against civilians.

Hypothesis 3b: The arrival of peacekeepers will lead to an increase in the government's violence against civilians in neighboring areas.

The second mechanism—peacekeepers' impact on organizational capacity—functions differently for rebel groups and governments in post-conflict settings. As originally noted in Walter (1997), the critical barrier to settling civil wars is that one side must disarm while the other retains its capacity for and monopoly on the legitimate use of force. In a post-civil war context, it will necessarily be the case that the government or ruling party must retain the ability to use force while the rebel group (or losing side) must disarm and demobilize.

As a result of this, the impact of PKOs on the capacity of rebel groups will differ from the impact on the capacity of governments.

While peacekeeping delegitimizes rebel groups, it often enhances the legitimacy of the state. As a result, PKOs can strengthen a government's organizational capacity and long-term viability. Upon withdrawal, the state may be more capable of committing violence against civilians. Any restraining effect peacekeepers had on state violence may dissipate, potentially leading to increased violence in formerly patrolled areas and sustained violence in neighboring, unmonitored regions. The final hypotheses stem from this logic.

Hypothesis 4a: The withdrawal of peacekeepers will increase the level of government violence against civilians in the immediate area.

Hypothesis 4b: The withdrawal of peacekeepers will not decrease government violence against civilians in neighboring areas.

Research Design

To understand what happens when peacekeepers leave, we use the ACLED and RADPKO datasets. The Armed Conflict Location and Events Database (ACLED). ACLED is an event-based dataset introduced by Raleigh et al. (2010) that is widely used and predominantly measures violent events. This dataset utilizes intercoder reliability checks, has dedicated coders for countries, and receives information from four different types of sources.² Most importantly for us, ACLED allows us to measure levels of civilian violence.

Our second data source is the Robust Africa Deployments for PKOs (RADPKO) dataset (Hunnicutt and Nomikos 2020), which provides comprehensive monthly time-series data on all Chapter VII UN peacekeeping missions in Africa from 1999-2017 until termination, modification, or continuation. The focus on Chapter VII missions is crucial, as our proposed mechanisms depend on two features that distinguish them from Chapter VI operations. First, peacekeepers must patrol locally; remaining on base prevents any deterrent effect. Second,

they must be authorized to protect civilians and impose costs on belligerents. The ability to use force is essential for reducing both operational and organizational capacity. RADPKO covers Ch. VII missions deployed to the following locations: Abyei, Burundi, Chad, the Central African Republic, Côte d'Ivoire, the Democratic Republic of Congo, Liberia, Mali, Sierra Leone, South Sudan, and Sudan.

Dependent Variables

Using ACLED data, we code several types of violence as dependent variables, broadly categorized into fatalities and violent events. Within each, we separately measure government and rebel violence against civilians. These outcomes are assessed both as probabilities and counts. The probability of violence is a binary indicator coded as 1 if at least five civilian deaths or five violent events occur in a grid-month; the count reflects the total number of deaths or events in that month. We measure each outcome within the focal grid cell and its neighboring cells, defined using queen contiguity (a 3x3 grid with eight neighboring cells). Each dependent variable is analyzed at the time of peacekeeper arrival and withdrawal in both the same and neighboring cells.

Independent Variables

Our independent variable is peacekeeper presence, defined as a dichotomous measure of the arrival or exit of a peacekeeping unit in a PRIO-grid. A PRIO-grid is approximately 55 km x 55 km, with borders determined exogenously of any geospatial or political considerations, meaning for all purposes the borders are random (Tollefsen, Strand, and Buhaug 2012). Thus, any data discrepancies, such as missing or incomplete data, should be evenly distributed across grids. We use the RADPKO data to identify when the peacekeepers entered and exited the grid. This data contains nearly 400,000 observations spread out over close to twenty years in every Chapter VII UN PKO in Africa. For descriptives on the length of stay by mission, see Table 1 and Figure 2.

Table 1: Descriptive statistics for monthly PRIO-grid deployments by mission.

Mission	Mean	Median	SD	Min	Max	Years of Operation
MINURCAT	37.00	20.0	29.55	1	83	2007–2010
MINUSCA	25.92	31.0	11.27	1	46	2014–
MINUSMA	38.67	45.0	11.05	12	45	2013–2023
MONUC/MONUSCO	33.45	17.0	45.96	2	215	1999–
ONUB	16.25	19.5	8.59	2	26	2004–2006
UNAMID	89.55	116.0	38.81	3	147	2007–2020
UNAMSIL	33.52	33.0	24.22	4	71	1999–2005
UNISFA	46.00	65.0	29.77	4	69	2011–
UNMIL	83.96	94.5	58.14	4	154	2003–2018
UNMIS	63.59	61.0	40.46	3	147	2005–2011
UNMISS	41.59	61.0	23.00	4	61	2011–
UNOCI	60.80	44.0	43.19	2	120	2004–2017

Our approach improves upon early studies of peacekeeping effectiveness, which relied on assumptions about the temporal and spatial distribution of peacekeepers due to limited data availability (Greig and Diehl 2005). These studies typically used annual measures aggregated at the country level. In contrast, RADPKO provides monthly data disaggregated to PRIO grid cells. Sourced from UN Secretary-General reports, often updated at a quarterly but sometimes monthly rate, this dataset offers the most detailed public record of peacekeeper deployments. Our treatment variable, PKO Deployed, is a binary indicator marking the arrival or exit of a peacekeeping unit,³

Difference-in-Differences Design

To assess the mechanisms of peacekeeper effectiveness, we use a difference-in-differences (DiD) approach. We begin by outlining the data structure and explaining how our research design best addresses the research question. We then discuss recent critiques of the generalized DiD two-way fixed effects (TWFE) model—typically used for this type of data—and describe the alternative model we adopt in response. We conclude the section with an explanation of the Group-Time Average Treatment Effect model (Callaway and Sant’Anna 2021), including how control groups are selected. While our data limits definitive causal claims, the

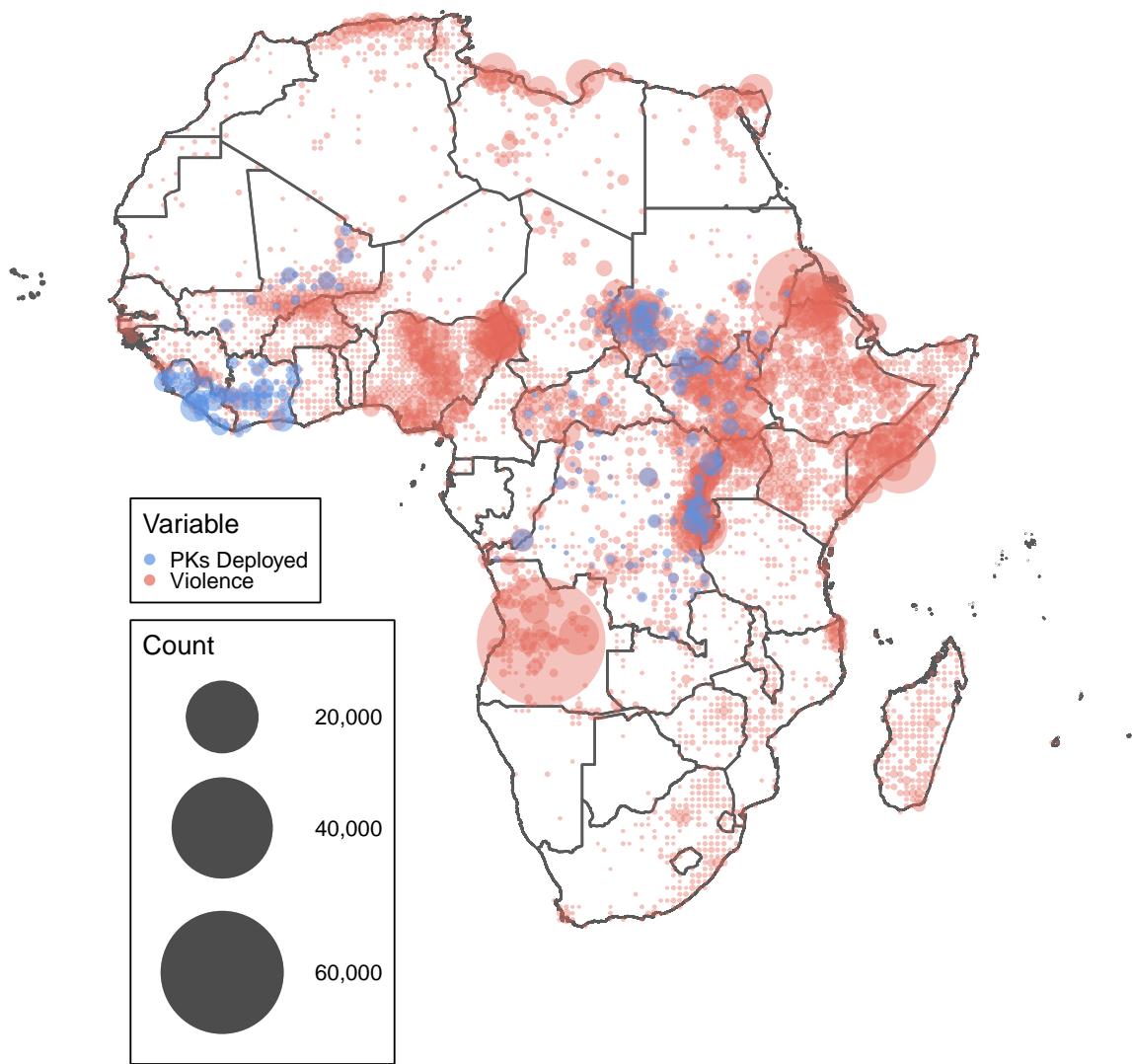


Figure 2: The dispersion of violence and Chapter VII PKOs throughout Africa from 2000-2017.

DiD design provides the strongest available strategy to account for unobserved confounders and estimate the causal effect of peacekeeping deployments.

The data spans multiple years and includes time-varying treatment exposure. A single grid cell may move in and out of the "treated" category—for example, entering treatment when peacekeepers are deployed, reverting to control when they leave, and returning to treatment if they are redeployed. From this, one might conclude that the traditional two-way fixed effects model is most appropriate. However, recent scholarship has shown that TWFE models are not robust to treatment effect heterogeneity (Callaway and Sant'Anna 2021; Roth et al. 2023). To address these limitations, we adopt the alternative method introduced by Callaway and Sant'Anna (2021).

Callaway and Sant'Anna (2021)'s method, the Group-time Average Treatment Effect (GTATE), is a more appropriate way to approach staggered DiD designs. The treatment effect of the GTATE model is "the average treatment effect for group g at time t , where a 'group' is defined by the time period when units are first treated" (*ibid.*: 201). The GTATE assigns each grid a time period of t , $t + 1$, $t + 2$..., and so on until the final time period. To make comparisons, the GTATE pools all treatment effects of the groups first treated at time t and then compares those to the "not-yet treated" and "never-treated" groups at identical time t . This resolves the aforementioned issues with the TWFE models. The GTATE can be further aggregated beyond group-time comparisons to a single average treatment effect on the treated (ATT), interpreted identically to canonical DiD analyses. Regardless of the model used to calculate a difference-in-differences estimate, parallel trends remain key to assessing model viability. For explanations and plots of the parallel trends tests using the GTATE models, see the Online Appendix.

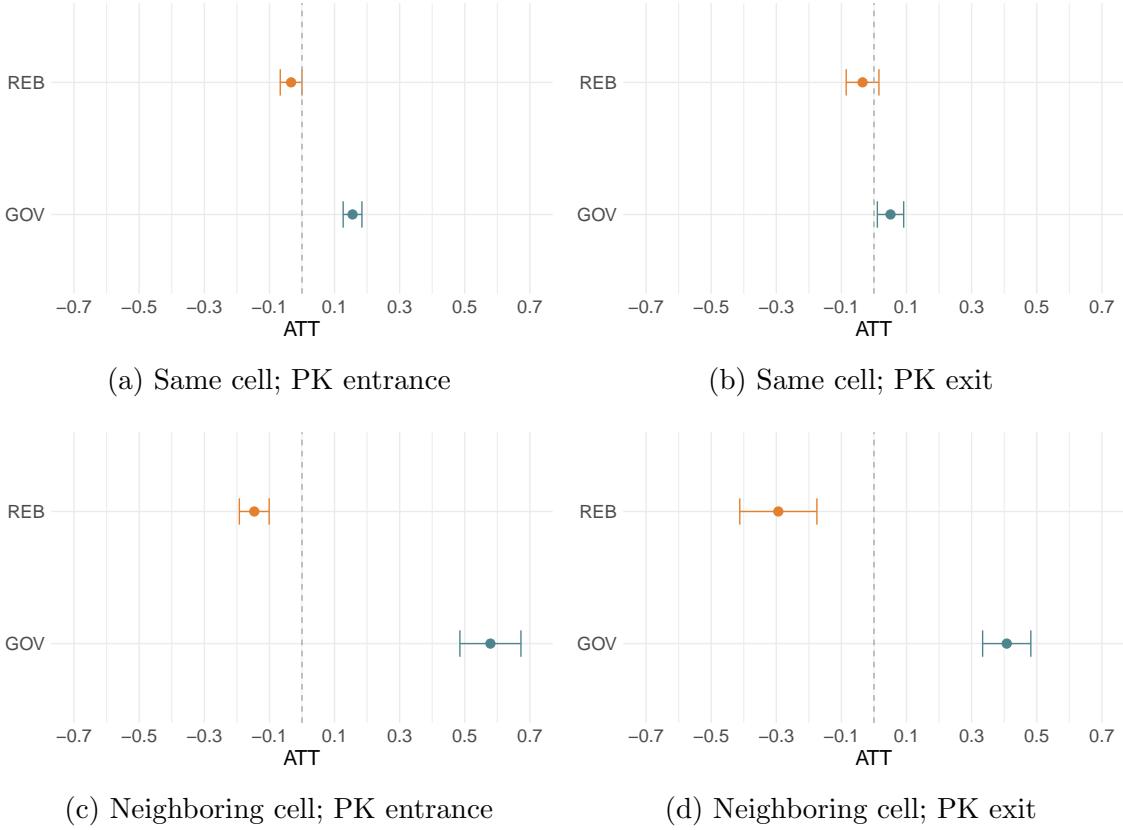


Figure 3: Total violent events against civilians in same and neighboring cells when peacekeepers enter and exit. Note: Violence in “Same” cell sum calculations is measured from a single grid, while neighboring violence is the sum of all neighboring grids. While the models account for this, it means that sum calculations must be cautiously interpreted between same and neighboring cell models.

Analysis and Discussion

We use the difference-in-differences approach outlined above to assess the impact of peacekeeper entrance and exit on violence against civilians carried out by rebel groups and the government in local areas and neighboring areas. Broadly, our results suggest that peacekeeper arrival leads to an increase in state violence against civilians locally and nearby. Peacekeepers tend to reduce rebel violence, especially in areas neighboring peacekeeping deployments, suggesting that peacekeepers increase state violence and decrease rebel violence against civilians.

We begin with our hypotheses on the impact of peacekeeper entrance on rebel violence,

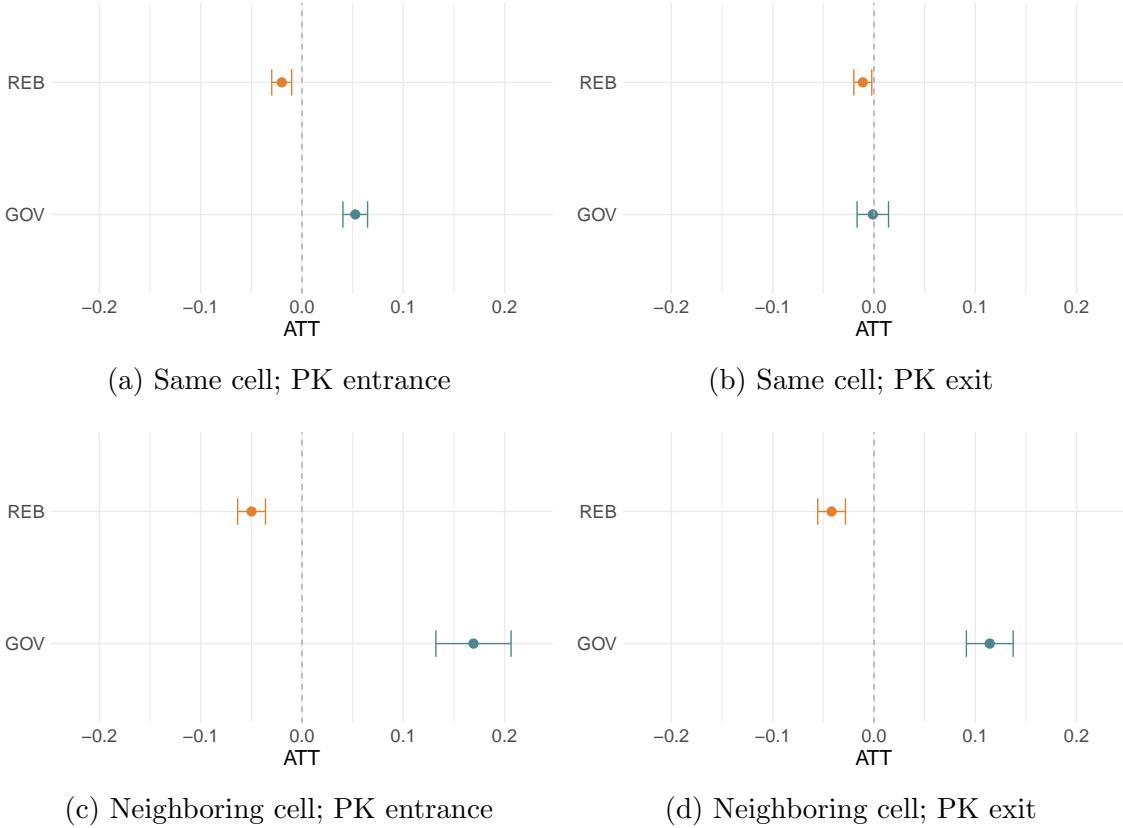


Figure 4: Probability of violent events against civilians in the same and neighboring cells when peacekeepers enter and exit.

shown in the ATT estimates of Figures 3a, 4a, 3c, and 4c.⁴ The results provide weak support for H1a and moderately strong support for H1b. When peacekeepers enter a cell, there is a moderate decrease in rebel violence in that cell, but a substantially larger decrease in neighboring cells. These results indicate that peacekeeper entrance has stronger effects on rebel violence in neighboring cells. Our findings suggest that peacekeepers are effective in reducing rebel operational capacity sufficiently such that rebels are unable to project their power outside of the immediate area.

These findings are consistent with the idea that peacekeepers reduce rebel operational capacity not only locally but also in surrounding areas. This is likely due to the nature of peacekeeper engagement, especially in Ch. VII missions. Upon arrival, peacekeepers, either acting independently or in conjunction with the host state, often use force to at-

tack rebel groups. Take, for example, the UN Mission to the Democratic Republic of the Congo (MONUSCO). After several years of severe rebel violence against civilians and government targets, the UN adjusted its approach. Rather than simply observing combat, MONUSCO shifted to active offensive actions against rebels, often in conjunction with state forces (Sweet 2019). The mission shifted closer to a counterinsurgency phase, where peacekeepers directly assisted in countering rebels. Similarly, in the Central African Republic, UN troops supported by French forces conducted aerial bombardments of rebel strongholds (Dembassa-Kette 2015).

We now turn to H2a and H2b, which assess whether peacekeeper withdrawal affects rebel violence. The results, illustrated in Figures 3b, 3d, 4b, and 4d, support both hypotheses. In comparing treated and non-treated units, we find that rebel violence remains low in both local and neighboring cells following peacekeeper exit. In the cell peacekeepers depart, the change is close to zero, but in neighboring cells, the decrease in violence persists.

These findings suggest that peacekeeper presence diminishes rebel capacity in ways that outlast the deployment. The continued reduction in violence in neighboring cells implies that peacekeepers do more than temporarily suppress rebel activity; indeed, they degrade the organizational capacity of the group over time. This is particularly evident in the deployment's neighboring areas, where the absence of peacekeepers does not correspond to the return of rebel violence. Instead, the effects of peacekeeper intervention appear to remain, potentially indicating a longer-term disruption of rebel networks and infrastructure.

The logic here follows from the earlier findings: peacekeepers reduce rebel operational capacity through peace enforcement operations and coordination with state forces. However, the persistence of low rebel violence does not necessarily mean civilian targeting is decreased on the whole, even as rebels' ability to reorganize, mobilize, and reassert control is curtailed. While this deterrent action against rebels may cause a decrease in rebel violence in the short term, it likely increases the incentives for government political violence. By committing violence against rebel groups and generally siding with the incumbent, peacekeepers change

Time	Cell	Actor	ATT	SE
Enter	Same	GOV	0.1553*	0.0288
Enter	Same	REB	-0.0334	0.0333
Enter	Neighbor	GOV	0.5788*	0.0938
Enter	Neighbor	REB	-0.1465*	0.0458
Leave	Same	GOV	0.0508	0.0404
Leave	Same	REB	-0.0351	0.0503
Leave	Neighbor	GOV	0.4077*	0.0740
Leave	Neighbor	REB	-0.2938*	0.1184

Table 2: Table for our main results testing the temporal effects of peacekeeper entrance and exit on the total events of violence against civilians. * = p-value lower than 0.05; bootstrapped standard errors are used to calculate the confidence intervals.

how power is distributed within an area, which alters the incentives for both sides. Rebels are weakened, thus lowering their operational capacity to compete with state forces. Their decrease in capacity corresponds to a lower ability and likelihood to commit violence. In this sense, withdrawal serves as a test of whether the intervention had lasting effects. Figures 3 and 4 suggest that it did.

Turning to the hypotheses on state violence, we do not find evidence for H3a; rather, we find that peacekeeper entrance is associated with an increase in state violence against civilians, both locally and in neighboring cells. When peacekeepers enter a cell, the probability of state violence in that cell increases by nearly 5%, and the amount of total civilian fatalities increases as well. These findings contradict our expectations under H3a, which posited no change in local government violence following peacekeeper arrival. The increase in violence may reflect a stronger incentive structure than previously theorized, one in which the state seeks to consolidate its monopoly on the legitimate use of force by leveraging the presence of a PKO to strengthen both its operational and organizational capacity.

We find strong support for H3b. Upon peacekeeper entrance, the probability and amount of state violence more than triple in neighboring cells compared to same-cell violence. Rather than deterring state violence, peacekeeper deployments may empower government forces to commit violence against civilians, particularly in areas not directly patrolled by UN peacekeepers. These results suggest a spatial dispersion of government violence: as the state

Time	Cell	Actor	ATT	SE
Enter	Same	GOV	0.0526*	0.0122
Enter	Same	REB	-0.0200*	0.0098
Leave	Same	GOV	-0.0012	0.0155
Leave	Same	REB	-0.0110	0.0088
Enter	Neighbor	GOV	0.1693*	0.0371
Enter	Neighbor	REB	-0.0498*	0.0137
Leave	Neighbor	GOV	0.1143*	0.0231
Leave	Neighbor	REB	-0.0418*	0.0137

Table 3: Table for our main results testing the temporal effects of peacekeeper entrance and exit on the probability of violence against civilians. * = p-value lower than 0.05; bootstrapped standard errors are used to calculate the confidence intervals.

perceives an opportunity to reassert control through weakened rebel groups that nonetheless remain a threat, it may use violence directed at civilian populations to achieve that goal.

This pattern is consistent with the broader logic of capacity imbalance. Once peacekeepers reduce rebel capacity, the government faces less competition locally. Two factors may initially present as obstacles to government violence, especially against civilians, but we argue that peacekeeper presence and violence change the nature of these obstacles. Rebels, now less able to challenge the incumbent, no longer serve as a meaningful check on state violence (Schelling 1966). The second barrier to violence, peacekeepers, will be unlikely to intervene against state forces even when present, as peacekeepers operate with the consent of the host government (Hultman, Kathman, and Shannon 2014; Fjelde, Hultman, and Nilsson 2019). For example, in South Sudan’s Yei region in 2016, government forces carried out widespread abuses against civilians while repeatedly denying UNMISS access to affected areas, demonstrating how host-state consent enables governments to restrict peacekeeper movement and block intervention against state violence (UNMISS and OHCHR 2017). Thus, peacekeeper violence against rebel forces may unintentionally increase the likelihood of state-perpetrated violence, both in the immediate area and in neighboring cells.

We argue that the increase in neighboring-cell violence upon peacekeeper entrance is also explained by the broader weakening of rebel capacity. Rebels in adjacent areas are now on weaker footing than they otherwise would be, and the incumbent is more likely

to recommit itself to surrounding locations. While the state may have some reservations about committing violence against civilians in areas where peacekeepers are deployed, it is less likely to face deterrent force from peacekeepers, as the presence of a PKO depends on cooperation from the state government (Phayal and Prins 2020). Additionally, the state is more likely to have fewer reservations about committing violence in areas outside the purview of peacekeepers (Fjelde, Hultman, and Nilsson 2019). These dynamics are reflected in our results, particularly in the patterns of increased state violence in neighboring cells, as shown in Tables 2 and 3.

Similar to our findings on peacekeeper exit and rebel violence, we find that peacekeeper exit does not shift state behavior. We find some evidence for H4a, suggesting that the withdrawal of peacekeepers increases the level of government violence against civilians in the immediate area, although this evidence is stronger based on total violent events compared to the probability of violent events. We find strong evidence for H4b, as both models suggest that peacekeeper exit will lead to a continued increase (compared to non-treated units) in government violence against civilians in neighboring cells. This evidence supports the notion that PKOs strengthen the state’s capacity to project force within its borders. While peacekeepers may not directly influence the state’s targeting decisions, their presence appears to enhance the government’s organizational capacity and ability to sustain violence over time. This may further exacerbate violence in the long-term after departure; once MINUSMA withdrew from Mali, for example, the state’s armed forces, along with Wagner Group contractors escalated attacks against rebels and civilians (HRW 2024).

While our difference-in-differences GTATE approach helps account for potential confounders (Card and Krueger 1994), we acknowledge remaining threats to inference. Peacekeepers are often deployed to the most challenging cases, which could bias estimates downward, yet they still tend to reduce violence compared to counterfactual scenarios without deployment (Ruggeri, Dorussen, and Gizelis 2017). Peacekeepers are not typically permanently stationed in fixed locations; they frequently operate from temporary bases and

redeploy across regions in response to shifting violence (Kunkel 2024). While we cannot observe counterfactual violence directly, our design mitigates bias from anticipation effects, which are unlikely to affect neighboring cells where the strongest effects are observed. The consistent patterns across rebel and government actors suggest that peacekeeper presence alters the strategic environment in ways that shape violence outcomes. We interpret these findings as evidence that Ch. VII PKOs reduce rebel operational and organizational capacity and decrease rebel violence against civilians, but are less successful at curbing government violence and may even contribute to its increase, particularly in areas not directly patrolled by peacekeepers.

Overall, our findings present strong evidence that Ch. VII PKOs are able to reduce the operational and organizational capacity of rebel groups and decrease rebel violence against civilians. They are, however, less successful at reducing violence against civilians committed by the government and can even lead to an increase in government-perpetrated violence, particularly in areas not directly patrolled by PKOs.

Conclusion

This paper examines the mechanisms through which peacekeepers influence rebel and state violence against civilians, focusing on the effects of both their arrival and withdrawal. While existing literature broadly supports the idea that peacekeepers reduce violence, our findings suggest a more complex reality. Rather than uniformly decreasing violence, peacekeeper deployment appears to displace it—reducing rebel violence while coinciding with increased state violence. We find strong evidence that PKOs effectively reduce rebel-perpetrated violence by weakening rebels’ operational and organizational capacity. However, they are far less effective at curbing government violence, largely because peacekeepers—implicitly or explicitly—support the state and therefore lack the leverage to constrain it. This dynamic was illustrated in the opening vignette: in Djugu, rebel activity declined following peace-

keeper deployment, yet state and state-sponsored violence increased during and after their presence.

The UN deploys Chapter VII missions with the aim of reducing violence against civilians, often authorizing the use of force against belligerents to achieve that goal. However, the expectation that peacekeeper action—particularly against rebel groups—will lower overall violence may be overly optimistic. Our findings suggest that the arrival of peacekeepers can displace violence to neighboring areas rather than eliminate it. By weakening rebel groups and bolstering state capacity, peacekeepers may inadvertently enable the state to commit more violence. These results suggest that PKOs do not necessarily foster durable peace; instead, their effects on violence are complex, interconnected, and vary across actors and space.

Rather than centering PKO movement within a country as the primary causal mechanism, future research should explore how other factors shape the distribution of violence. PKOs are multidimensional and often coincide with other forms of international intervention—an area that warrants further investigation. In particular, more attention should be given to understudied aspects of peacekeeping, such as its economic effects and broader impacts on state institutions and civilian populations. Understanding how peacekeepers influence not only armed actors but also the everyday experiences of civilians remains a key area for future research.

We are cautious about making specific policy recommendations and do not wish to suggest limiting the deployment of peacekeeping operations (PKOs), which remain a vital instrument of international intervention and post-conflict stabilization. To this end, we do not argue that PKOs are broadly ineffective or should be abandoned. Rather, our findings call for a more nuanced perspective—one that recognizes peacekeeping’s strengths, particularly in diminishing and demobilizing rebel groups, while also acknowledging its limitations, especially in constraining state violence. What is needed is a careful reconsideration of the contexts and circumstances under which PKOs are authorized to use force, as our analysis suggests

that such authorization can, in some cases, exacerbate negative externalities. As scholars and policymakers seek to improve conflict management strategies, continued research into the conditional effectiveness of PKOs remains essential.

Notes

1. The government may also target civilians due to operating in a low-information environment where they have difficulty discerning between friend and foe (Lyall 2009).
2. ACLED further explains how its database is sourced and constructed here:

<https://acleddata.com/>

3. Including military, police, and/or observers.
4. A table of all results can be found in the Online Appendix.

References

- Bara, Corinne, and Lisa Hultman. 2020. "Just Different Hats? Comparing UN and Non-UN Peacekeeping." *International Peacekeeping* 27, no. 3 (May): 341–368.
- Beardsley, Kyle. 2011. "Peacekeeping and the Contagion of Armed Conflict." *The Journal of Politics* 73, no. 4 (October): 1051–1064.
- Beardsley, Kyle, David E. Cunningham, and Peter B. White. 2019. "Mediation, Peacekeeping, and the Severity of Civil War." *Journal of Conflict Resolution* 63, no. 7 (August): 1682–1709.
- Beardsley, Kyle, and Kristian Skrede Gleditsch. 2015. "Peacekeeping as Conflict Containment." *International Studies Review* 17, no. 1 (March): 67–89.
- Beber, Bernd, Michael J Gilligan, Jenny Guardado, and Sabrina Karim. 2019. "The Promise and Peril of Peacekeeping Economies." *International Studies Quarterly* 63, no. 2 (June): 364–379.
- . 2017. "Peacekeeping, Compliance with International Norms, and Transactional Sex in Monrovia, Liberia." *International Organization* 71 (1): 1–30.
- Callaway, Brantly, and Pedro H.C. Sant'Anna. 2021. "Difference-in-Differences with multiple time periods." *Journal of Econometrics* 225, no. 2 (December): 200–230.
- Card, David, and Alan B. Krueger. 1994. "Minimum Wages and Employment: A Case Study of the Fast-Food Industry in New Jersey and Pennsylvania." *The American Economic Review* 84 (4): 772–793.
- Carnegie, Allison, and Christoph Mikulaschek. 2020. "The Promise of Peacekeeping: Protecting Civilians in Civil Wars." *International Organization* 74 (4): 810–832.
- Costalli, Stefano. 2014. "Does Peacekeeping Work? A Disaggregated Analysis of Deployment and Violence Reduction in the Bosnian War." *British Journal of Political Science* 44, no. 2 (April): 357–380.
- Dembassa-Kette, Crispin. 2015. "Peacekeepers kill seven rebels in Central African Republic fighting." *Reuters* (February).
- Di Salvatore, Jessica. 2020. "Obstacle to Peace? Ethnic Geography and Effectiveness of Peacekeeping." *British Journal of Political Science* 50, no. 3 (July): 1089–1109.
- Dorussen, Han. 2015. "Security Perception after the Completion of UN Peacekeeping in Timor-Leste." *Peace Economics, Peace Science and Public Policy* 21, no. 4 (December): 453–458.
- Dworschak, Christoph, and Deniz Cil. 2022. "Force Structure and Local Peacekeeping Effectiveness: Micro-Level Evidence on UN Troop Composition." *International Studies Quarterly* 66, no. 4 (October): 1–17.
- Fjelde, Hanne, Lisa Hultman, and Desirée Nilsson. 2019. "Protection Through Presence: UN Peacekeeping and the Costs of Targeting Civilians." *International Organization* 73 (1): 103–131.
- Fjelde, Hanne, and Hannah M. Smidt. 2022. "Protecting the Vote? Peacekeeping Presence and the Risk of Electoral Violence." *British Journal of Political Science* 52 (3): 1113–1132.
- Fortna, Virginia Page. 2008. *Does Peacekeeping Work?: Shaping Belligerents' Choices after Civil War*. Princeton University Press, July.

- Gledhill, John. 2020. "The Pieces Kept after Peace is Kept: Assessing the (Post-Exit) Legacies of Peace Operations." *International Peacekeeping* 27, no. 1 (January): 1–11.
- Greig, J. Michael, and Paul F. Diehl. 2005. "The Peacekeeping-Peacemaking Dilemma." *International Studies Quarterly* 49, no. 4 (December): 621–646.
- Holt, Victoria, Glyn Taylor, and Max Kelly. 2009. *Protecting Civilians in the Context of UN Peacekeeping Operations: Successes, Setbacks and Remaining Challenges*. United Nations: Department of Peacekeeping Operations and the Office for the Coordination of Humanitarian Affairs.
- HRW. 2024. *Mali: Army, Wagner Group Atrocities Against Civilians — Human Rights Watch*. Human Rights Watch, March 28, 2024.
- Hultman, Lisa, Jacob Kathman, and Megan Shannon. 2013. "United Nations Peacekeeping and Civilian Protection in Civil War." *American Journal of Political Science* (May): 875–891.
- . 2014. "Beyond Keeping Peace: United Nations Effectiveness in the Midst of Fighting." *American Political Science Review* 108, no. 4 (November): 737–753.
- Hunnicutt, Patrick, and William G. Nomikos. 2020. "Nationality, Gender, and Deployments at the Local Level: Introducing the RADPKO Dataset." *International Peacekeeping* 27, no. 4 (August): 645–672.
- Johansson, Karin, and Lisa Hultman. 2019. "UN Peacekeeping and Protection from Sexual Violence." *Journal of Conflict Resolution* 63, no. 7 (August): 1656–1681.
- Karim, Sabrina. 2020. "The Legacy of Peacekeeping on the Liberian Security Sector." *International Peacekeeping* 27, no. 1 (January): 58–64.
- Kolbe, Athena R. 2020. "Prospects for Post-Minustah Security in Haiti." *International Peacekeeping* 27, no. 1 (January): 44–57.
- Kunkel, Sky. 2024. *All About That Base... No Trouble: the Gravity of Peacekeeping Bases*. Working paper, July 8, 2024.
- Lyall, Jason. 2009. "Does Indiscriminate Violence Incite Insurgent Attacks?: Evidence from Chechnya." *Journal of Conflict Resolution* 53, no. 3 (June): 331–362.
- Peitz, Laura, and Gregor Reisch. 2019. "Violence reduction or relocation?: Effects of United Nations troops presence on local levels of violence." *Zeitschrift für Friedens- und Konfliktforschung* 8, no. 2 (October): 161–181.
- Phayal, Anup, and Brandon C. Prins. 2020. "Deploying to Protect: The Effect of Military Peacekeeping Deployments on Violence Against Civilians." *International Peacekeeping* 27 (2): 311–336.
- Raleigh, Clionadh, Andrew Linke, Håvard Hegre, and Joakim Karlsen. 2010. "Introducing ACLED: An Armed Conflict Location and Event Dataset: Special Data Feature." *Journal of Peace Research* 47, no. 5 (September): 651–660.
- Reeder, Bryce W., Michael Hendricks, and Edward Goldring. 2022. "All Peacekeeping is Local: Measuring Subnational Variation in Peacekeeping Effectiveness." *International Studies Quarterly* 66 (2): 1–12.
- Roth, Jonathan, Pedro H. C. Sant'Anna, Alyssa Bilinski, and John Poe. 2023. "What's trending in difference-in-differences? A synthesis of the recent econometrics literature." *Journal of Econometrics* 235, no. 2 (August): 2218–2244.

- Ruggeri, Andrea, Han Dorussen, and Theodora-Ismene Gizelis. 2017. "Winning the Peace Locally: UN Peacekeeping and Local Conflict." *International Organization* 71 (1): 163–185.
- . 2018. "On the Frontline Every Day? Subnational Deployment of United Nations Peacekeepers." *British Journal of Political Science* 48, no. 4 (October): 1005–1025.
- Sandler, Todd. 2017. "International Peacekeeping Operations: Burden Sharing and Effectiveness." *Journal of Conflict Resolution* 61 (9): 1875–1897.
- Schelling, Thomas C. 1966. *Arms and Influence*. Yale University Press.
- Sweet, Rachel. 2019. *Militarizing the Peace: UN Intervention Against Congo's 'Terrorist' Rebels*, June.
- Tollefsen, Andreas Forø, Håvard Strand, and Halvard Buhaug. 2012. "PRIO-GRID: A unified spatial data structure." *Journal of Peace Research* 49, no. 2 (March): 363–374.
- UNMISS and OHCHR. 2017. *Human Rights Violations and Abuses in YEI: July 2016–January 2017*. United Nations, May 19, 2017.
- Walter, Barbara F. 1997. "The Critical Barrier to Civil War Settlement." *International Organization* 51 (3): 335–364.
- Walter, Barbara F., Lise Morje Howard, and V. Page Fortna. 2021. "The Extraordinary Relationship between Peacekeeping and Peace." *British Journal of Political Science* 51, no. 4 (October): 1705–1722.
- Weinstein, Jeremy M. 2007. *Inside rebellion: the politics of insurgent violence*. Cambridge studies in comparative politics. Cambridge ; New York: Cambridge University Press.