

## **On the Frontline Every Day?**

### **Subnational Deployment of United Nations Peacekeepers**

*Andrea Ruggeri (Brasenose College, University of Oxford)*

*andrea.ruggeri@politics.ox.ac.uk*

*Han Dorussen (University of Essex)*

*hdorus@essex.ac.uk*

*Theodora-Ismene Gizelis (University of Essex)*

*tig@essex.ac.uk*

#### **Abstract**

Research has shown that United Nations peacekeepers tend to be deployed to 'hard cases', or civil wars that are the most difficult to resolve. Much less is known about where peacekeepers are deployed within a country affected by conflict. However, to assess the actual contribution of peacekeepers to peace, it matters whether they are deployed to conflict zones or remain largely in relatively safe areas. This article examines UN peacekeeping deployment subnationally, using a theoretical framework contrasting an 'instrumental' logic of deployment versus a logic of 'convenience'. The implications of both logics are evaluated using geographically and temporally disaggregated data on the stationing of United Nations peacekeepers in eight African countries between 1989 and 2006. The analysis of geo-referenced event data demonstrates that peacekeepers are deployed on the frontline. However, even though they go where conflict occurs, there is a notable delay in when they are deployed. Furthermore particularly in larger countries, the accessibility to major urban areas also influences the deployment of peacekeepers.

Previous versions were presented at the 1<sup>st</sup> EPSA meeting, Dublin, 16-18 June 2011 and at the annual ISA meeting, San Diego, CA, April 2012. Project supported by funding of the Folke Bernadotte Academy, Sweden. We thank Brian Burgoon, Giovanni Carbone, Paul Diehl, Robert Franzese, Erik Gartzke, Birger Heldt, Nils Weidmann, and Andreas Tollefsen for their comments. We thank the editor, Shaun Bowler, and 9 anonymous reviewers for making this article better.

## Introduction

Honoring fallen peacekeepers, the Under-General-Secretary of the UN, Hervé Ladsous, noted how peacekeepers “work in some of the most dangerous places on earth in order to help bring stability to some of the world’s most marginalized and vulnerable peoples,” and that they “are on the frontline every day”.<sup>1</sup> In 2013, the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO) backed a government offensive in the eastern parts of the Democratic Republic of Congo (DRC). The offensive routed the rebel group M23 and ended their 18-month insurgency. In sharp contrast to the active role of MONUSCO to end the insurgency, MONUC, the prior United Nations Organization Mission in the DRC, was regularly criticized for failing to bring peace and its limited success in protecting civilians against attacks, looting and mass rape by rebels, militia and the DRC army.<sup>2</sup> At the same time, MONUC suffered 161 fatalities showing the real risks of peacekeeping. The contrast illustrates that peacekeepers are sometimes deployed to areas where violent armed confrontations occur, but not always. Here we examine whether peacekeepers actually go to locations within countries where the civil war rages<sup>3</sup> or whether they remain in areas away from actual fighting. We identify the pull

---

<sup>1</sup> *United Nations*, 29 May 2012

(<http://www.un.org/en/events/peacekeepersday/2012/usgmedal.shtml>). Accessed 14 September 2013.

<sup>2</sup> *The Guardian*, 8 September 2010. (<http://www.guardian.co.uk/world/2010/sep/08/congo-mass-rape-500-khare>). Accessed 14 September 2013.

<sup>3</sup> We use the terms (armed) conflict or civil war to describe violent armed confrontations over a contested incompatibility that involves control over the government and/or territory

and push factors that drive the subnational deployment of UN peacekeeping forces across different missions and over time.

Our approach underlines that the deployment of UN peacekeepers is actually a two-step process. At the first stage the UN Security Council authorizes a peacekeeping operation (PKO) based on global and country-specific considerations. However, once in a country, a second stage of deployment decisions takes place when the UN Special Representative to the country decides to deploy peacekeepers based on the conditions on the ground and local factors. The quantitative literature provides strong evidence that UN peacekeeping concentrates on ‘hard cases’ (Gilligan and Stedman 2003; Fortna 2008; Hultman 2013). Peacekeepers are predominantly deployed to countries where the task of building a stable peace is rendered particularly difficult as democracy and stable institutions are in short supply and the legacy of war includes a large number of civilian casualties. Recent evaluations of the effectiveness of peacekeeping recognize that this makes it more challenging for the UN to generate successful outcomes (Doyle and Sambanis 2006; Gilligan and Sergenti 2008; Hegre, Hultman and Nygård 2010; Beardsley and Schmidt 2012).

Yet case studies on the effectiveness of peacekeeping (Pouligny 2006; Autesserre 2010) cast doubt on the presence of UN PKO forces in parts of the country where the civil war is actually on-going. Restrictions on the use of force commonly imposed on UN peacekeepers and confusing rules of engagement, illustrated by missions like MONUC (Findlay 2002), have led observers to question whether UN

---

between parties where at least one is the incumbent government (Wallensteen and Sollenberg 2001). See Dittrich Hallberg (2012), especially at pages 221-223, for further technical details on local coding of civil wars.

missions are actually deployed in order to address conflict ‘hot-spots’.

In effect, existing research nearly exclusively<sup>4</sup> considers the first stage of deployment and so focuses primarily on the aggregate characteristics of conflicts, such as conflict history, national capabilities, and the characteristics of the missions (e.g., Doyle and Sambanis 2006). There has only been limited attention to the second stage in the deployment process, namely the local implementation of UN policies and practices as well as the exact deployment of UN forces within a country.<sup>5</sup> Our contribution is to focus on the second stage of deployment. Before being able to analyze any effect of peacekeeping on local conflict resolution, we first need to know whether UN forces are deployed subnationally to places where actual fighting takes place, or whether they remain primarily in the capital and other urban areas staying away from the most conflict prone areas.<sup>6</sup>

---

<sup>4</sup> A partial exception is the work by Townsen and Reeder (2014) and Powers, Reeder and Townsen (2015) who consider the geographic location of peacekeeping events, i.e., recorded interaction between peacekeepers and local actors, using PKOLED. Dorussen and Ruggeri (2007), who compiled the PKOLED data, report that the geocoding of such peacekeeping events is often imprecise. Further, by construction, peacekeeping events are endogenous to conflict because they encompass the monitoring and reporting of such events. The PKOLED data are thus unsuitable for the analysis attempted in these articles. Instead, our data rely on the actual deployment of peacekeepers.

<sup>5</sup> For exceptions, see Pouligny (2006) and Autesserre (2010). See also, Costalli (2014), Dorussen and Gizelis 2013 and Ruggeri, Gizelis, Dorussen 2013.

<sup>6</sup> In Ruggeri, Gizelis, Dorussen 2013 (p. 388) we note that the Security Council has basically two instruments at its disposal in response to an emergent crisis or political opportunity: it can revise the mandate of the mission and/or amend its authorized strength. Here, we focus

Although admittedly somewhat of a simplification, it is helpful to delineate two competing, ideal-type ‘logics’ of the deployment of peacekeepers: an instrumental logic and a logic of convenience. Here the term ‘logic’ refers to an internally consistent set of beliefs and rules structuring cognition and guiding decision-making and behavior. In that sense, it is best understood as a heuristic (Kahneman and Tversky 1979). We do not claim that the UN, contributing countries or the peacekeepers consciously subscribe to a particular logic, but we regard them as ideal-type categorizations allowing us to contrast and test opposing implications.

The instrumental logic stipulates that peacekeepers are deployed in order to contribute effectively to the resolution of conflict; in other words, peacekeepers are deployed to conflict areas. In contrast, according to the logic of convenience, feasibility determines deployment decisions: peacekeepers are deployed to areas where it is unlikely that they will have to engage in actual fighting, and where the infrastructure allows for easy deployment, reinforcement, and extraction of forces. The convenience logic assumes that the UN—and the individual countries contributing peacekeeping forces—is more risk averse than under the instrumental logic. The logic of convenience also emphasizes the bureaucratic nature of decision-

---

on the latter—especially on peacekeeping deployment subnationally—because arguably actual deployment is the strongest observable signal of UN resolve. More practically, we note that in general terms, there is little variation in the peacekeeping mandates for the missions in our study: they are all multi-dimensional peacekeeping missions. The specifics of the mandates, however, vary notably over time and across missions, and are very close in the chain of causation to actual deployment. Here, we want to examine how underlying factors, such the strategic importance and severity of conflict, affect subnational deployment.

making in the UN. Both logics draw attention to the costs of deploying peacekeepers, since the deployment to conflict zones requires more resources to maintain lines of communication and to safeguard peacekeepers.

Using subnationally disaggregated data on UN deployment in eight African countries, we evaluate empirically the relevance of both logics of peacekeeping deployment. We observe that peacekeepers are more likely to be deployed to areas that experienced civil war, but with a considerable time lag and biased towards urban areas. Taken together, the results suggest that peacekeeping still largely follows an instrumental logic, but that deployment decisions are also made pragmatically reflecting sensitivity to (political) costs and demonstrating risk aversion; in other words, in part following a logic of convenience.

The next section briefly discusses what is known about where the UN chooses to intervene and the characteristics of these conflicts. A discussion of the contrasting logics of UN peacekeeping deployment follows. Here, we expand on why it is important to look at disaggregated information in the study of peacekeeping operations. The empirical analysis first compares subnational deployment in eight UN peacekeeping missions, and next considers in more detail the deployment of UN peacekeepers in Sierra Leone. The conclusions discuss the implications of the results on subnational deployment for the study of the effectiveness of UN peacekeeping.

### **Where Do UN Peacekeepers Go?**

A popular view in the media and among many academics (Anderson 2000; Carter 2007; Gibbs 1997) is that UN peacekeeping missions are largely deployed to conflicts where the national interest of key Security Council members is at stake. Jacobsen (1996) argues that media attention, or the so-called CNN effect, influences when and

where the UN chooses to intervene. In one of the first systematic studies of possible bias in UN peacekeeping, Gilligan and Stedman (2003: 38) report conflict severity, measured in terms of casualties, as the key factor for intervention. They find that humanitarian and security concerns mainly motivate UN operations, but there is also a regional bias in favor of Europe and the western hemisphere. Fortna (2008) and de Jonge Oudraat (2007) similarly argue that the UN tends to intervene in more severe conflicts. Beardsley and Schmidt (2012) examine 210 international crises from 1945-2002 providing a comprehensive analysis of the politics of UN involvement. They find that although the overlap or conflict of national interests of the five permanent members of the Security Council indeed influences and constraints the ability of the UN to act in international crises, the severity of conflicts is a more important predictor of UN intervention. In particular civilian casualties seem to guide the UN in line with its stated principle of the responsibility to protect (see Hultman 2013). In short, a consensus has emerged that the UN intervenes mainly in so-called 'hard cases'.

Since the consensus that the UN selects hard cases is based on aggregate data, that is, country- and conflict-level data, it remains possible that the deployment at the local level does not follow a similar pattern. Costalli (2014) studies subnational variation in the presence of UN peacekeepers in Bosnia and highlights that UN tends to be active where there was high level of violence against civilians. However, other studies of individual missions show that there is notable variation in the subnational pattern of UN deployment. Even if UN intervenes in conflicts that are more violent or difficult to resolve, peacekeeping forces are often seen as locating themselves predominantly in relatively stable areas with a reliable infrastructure, that is, around

their headquarters or major cities, rather than being deployed to remote areas with poor infrastructure where actual fighting often takes place.

Several studies comment on how inapt local deployment impact on the quality of peacekeeping in specific missions. Autesserre (2010) and Pouligny (2006) use ethnographic methods and argue that the failure of the conflict resolution and peacekeeping strategies is rooted at the local level. These studies suggest that without a credible and capable *local* presence, peacekeepers remain largely irrelevant to the process of enforcing and maintaining peace. A reputation of peacekeepers as being soft targets or conflict avoiding casts doubts on their ability to engage with possible spoilers of peace, either militias or rebel groups. The loss of reputation for UN troops can encourage such groups to either directly challenge the peacekeeping forces—for instance, the Serb forces took hostage and used as human shields 400 peacekeepers in 1995 in Bosnia—or to commit atrocities in areas that are under the UN supervision, as in the case of Kiwanja in Congo (Human Rights Watch 2008). Such actions not only erode local support for UN involvement, but also the overall credibility of the organization to operate as a competent peacekeeping and peacebuilding force.

So far, nearly all comparative or quantitative studies have focused on aggregate country or conflict characteristics to explain UN intervention, such as, (under)development, severity of the conflict, number of casualties, and conflict duration. Arguably, such analyses leave out possibly relevant variation over time and space across and within missions.<sup>7</sup> Over the course of a conflict, the fortunes of the

---

<sup>7</sup> The politics among the (permanent) members of the Security Council to decide the specific mandates guiding intervention has also received scholarly attention. However, even though



varying warring parties, such as government and rebel forces, are likely to change, alliances are forged or broken, and battlefronts shift (Buhaug 2010). In such circumstances, it becomes important to know whether peacekeeping missions respond to emerging battlefronts and other territorial and political changes on the ground. The M23 rebellion and the subsequent deployment of an intervention brigade within MONUSCO—even authorized to act independently from the Congolese army if required—illustrate the fluidity of civil wars in the African context and how the roles of UN peacekeeping missions can change over time.

If the causes of civil war are local, the PKO mission, conflict or country is an unsuitable unit of analysis for the study of peacekeeping and peacebuilding. Kalyvas (2006; 2008) argues that since local grievances motivate violent collective action, any empirical implication should be tested at the local level as well. Accordingly, the disaggregation approach in the study of civil war makes use of data that are actor, time, and space specific. Mirroring the theoretical shift from structure to actor, empirical analyses increasingly rely on data collected at a highly detailed level. Just as the conditions for conflict are often local, the conditions for peace are also likely to be local. The disaggregation approach is thus relevant for the study of peacekeeping and conflict alike.

As far as we know, our study is the first to compare different UN missions in order to explore the factors that affect the subnational deployment of peacekeepers, allowing for spatial and temporal variation. If peacekeepers are not deployed and physically present in areas that experience civil war, then their ability to address

---

mandates tend to change over the course of a mission, analyses typically focus on comparing missions (Howard 2008).

conflict in its localized context will be compromised. To structure our analysis, we put forward that the deployment of UN PKOs is best understood as driven by two possible responses to local subnational conditions.

### **Explaining Deployment of Peacekeepers**

**INSTRUMENTAL LOGIC OF PEACEKEEPING**      Recent research on civil wars highlights the importance of variation in the ability of the state to project force across locations and to respond to local political and economic grievances (Buhaug 2010; Buhaug et al. 2011; Cederman, Gleditsch and Weidmann 2011). Civil wars often erupt in the periphery of countries. Geographical distance presents opportunities for minorities to mobilize and organize insurgencies, in particular in territorial disputes with separatist goals (Weidmann 2009). The periphery is particularly vulnerable to conflict when localized factors such as borders with neighboring countries, the presence of natural resources and population density interact with specific political and social factors, such as powerful ethnic minorities that are excluded from the political process (Buhaug, Cederman and Rød 2008). Geography not only affects the onset but also the duration of civil wars. Buhaug, Gates and Lujala (2009) show that remote areas along the border, and regions where valuable resources are located, have a higher probability of experiencing prolonged civil wars. Raleigh and Hegre (2009), however, find that the location of the conflict in the periphery of a country only moderately

prolongs conflict. Further, any effect is conditional on urban areas being located in the periphery, as for instance in the eastern provinces of the DRC.<sup>8</sup>

The instrumental logic of peacekeeping emphasizes that peacekeepers have to compensate for the limited capacity of government to project force in outlying areas. The loss-of-strength gradient can model the decreasing ability of a central government to impose its authority on outlying regions. Accordingly, peacekeeping can be seen as a form of external intervention intended to offset the loss-of-strength.<sup>9</sup> Typically, civil wars concern relatively weak governments that are unable to provide public goods, such as safety, law and order, and a working infrastructure. Multi-dimensional peacekeeping missions are asked to provide basic state functions for the local populations (Dorussen and Gizelis 2013; Ruggeri, Gizelis, Dorussen 2013). Effective conflict resolution thus requires peacekeepers to operate in areas where the central government is unable (or possibly unwilling) to address local grievances, and peacekeepers have to tackle the conflict locally. In practice this means that they have to operate in areas where central governments have limited reach.<sup>10</sup> The loss-of-

---

<sup>8</sup> Political instability and insurgencies in the periphery of a large country do not necessarily constitute a major threat to the stability of the political regime, as long as the government can exert effective control and extraction of resources to maintain political power and control over the majority of the territory. In contrast, smaller states, such as Liberia, have only a limited ability to ‘ignore’ rebellions.

<sup>9</sup> The concept of loss-of-strength gradient and the spatial dimension of conflict are not new to the study of international relations or conflict research (Boulding 1962).

<sup>10</sup> While it is common for African Union (AU) or the Economic Community of Western African States (ECOWAS) to deploy peacekeeping missions, either organization has only a limited capacity to undertake the comprehensive mandates given to UN PKOs. Moreover, the

strength gradient thus supports the deployment of peacekeepers in peripheral or border areas. Furthermore, geographical variation in social and economic conditions can lead to local grievances and so affect the location of the peacekeepers. The instrumental logic of peacekeeping stipulates a deployment to conflict areas and where the population is ‘at risk’.

The instrumental logic implies that peacekeepers are willing to take greater risk and that the deployment is more costly in terms of logistics and even loss of lives. In 2013 UN peacekeeping suffered 104 fatalities showing that peacekeeping is not without its risks.<sup>11</sup> At the same time, the deployment is tailored to be effective: peacekeepers go where the job needs to be done. Consequently, the instrumental logic requires that peacekeepers are present in conflict areas where the central government is weak relative to the rebels, and peacekeepers become responsible for providing public goods and governance—first of all security and humanitarian aid—to the local population. Hence if the instrumental logic of peacekeeping holds, our testable hypotheses as follows:

HYPOTHESIS 1: Peacekeepers are more likely to be deployed subnationally to areas affected by civil war.

---

UN only recently has been starting to evaluate policies of coordination with regional peacekeeping operations (see the Prodi Report, Prodi 2009). Here we focus on UN PKOs, but our empirical analyses control for the presence of a regional peacekeeping mission.

<sup>11</sup> (<http://www.un.org/en/peacekeeping/resources/statistics/fatalities.shtml>), Accessed 2

HYPOTHESIS 2: Peacekeepers are more likely to be deployed to border areas rather than near the center of a country.

LOGIC OF CONVENIENCE AND PEACEKEEPING The logic of deployment can also be articulated based on feasibility or convenience rather than efficacy: peacekeepers go where the conditions for deployment are most easily met. As a bureaucratic organization, the UN has an interest in protecting its reputation and budget, while safeguarding the vested interests of the member states (Barnett 1997; Cunliffe 2009). The bureaucratization of peacekeeping has affected decision-making at the UN and led to the development of criteria to decide the approval or extension of missions by the Security Council (Barnett 1997: 568). At the second, country-level, stage, standard procedures also inform decisions about local deployment. Internally defined routines and the reliance on standard operating procedures have historically led the UN to adopt self-defeating policies (Barnett and Finnemore 1999), and bureaucratic decision-making and the use of standard criteria also affect the deployment of peacekeepers. Howard (2008), Autesserre (2010) and Pouligny (2006) highlight some of the pathologies in the organization and deployment of peacekeeping missions. The application of universalism while ignoring particularities inevitably leads to the deployment of peacekeepers that do not correspond to local circumstances.

Concerns about feasibility and convenience can constrain the instrumental logic of deployment depending on the overall level of commitment to the mission by key UN actors, such as the members of the Security Council, as well as contributing countries. The practice of UN PKO deployment is that the Security Council issues a resolution based on the report of the situation by the Secretary-General. Once the

Security Council has authorized and outlined the mandate and size of the mission, the General Assembly approves the budget, and the Secretary-General appoints the Head of the Mission (Special Representative-SRSG), the Force Commander, the Highest Civilian Staff and Police Commissioner. The Special Representative and the Force Commander decide the operational deployment of the forces conditional on the political and security situation.<sup>12</sup> The SRSG and the Force Commander of the mission make the executive decision to move the deployment out further into parts of a given country based on security assessments and the success of the operation. Yet the Department of Peacekeeping Operations (DPKO), the Department of Financial Service (DFS), and the Department of Safety and Security (DSS) must facilitate and support the movement and establishment of forward deployments. The role of DPKO, DFS, and DSS in decisions on deployment within a country introduces bureaucratic constraints, implementation of internally determined criteria, and concerns about success in unpredictable environments. The logic of convenience suggests that the UN and peacekeepers are also risk and cost averse. They prefer to be deployed in areas that are readily accessible with a good (or at least usable) infrastructure and lines of communication. Accessibility matters possibly even more for the protection of peacekeepers who are on the ground since it affects also the ability to extract troops.

The ‘self-imposed’ constraints on where troops can be stationed do not exclusively or even necessarily reflect an overly risk averse culture at the UN or a disregard for local conditions. Missions need to be sourced with personnel from

---

<sup>12</sup> Interview with anonymous UN official, Liberia 2011, and anonymous official from Foreign & Commonwealth Office, London 2014.

multiple countries, and peacekeepers tend to take direct orders from their home capitals leading to different interpretations of the mandate and the acceptability of the use of force (Bove and Ruggeri 2015); especially when the mission shifts from traditional peacekeeping to peace enforcement. In these situations the national interests of the contributing countries may well trump concerns about the operational ability of the UN forces (Olonisakin 2008).<sup>13</sup>

Countries willing to contribute to UN peacekeeping missions often insist that the deployment of their troops conforms to national rules of deployment as well as the existence of a realistic exit strategy. Accordingly, at the subnational level logistic constraints influence the selection of deployment areas: distance from the capital, roughness of the terrain and lack of infrastructure, such as low road density, discourage the deployment of UN peacekeepers. As UNMIL officials pointed out in the most remote parts of Liberia, such as Gbarpolu, the UN forces had limited access to three districts for long periods of time. In 2011 it was still common for the UN forces to use helicopters to briefly visit remote areas and interact with the local elites rather than rely on regular patrols and establish contacts with a wider network of local actors. UN forces were more visible in the areas of Liberia with relatively easy access to Monrovia, such as Bong or upper Nimba, or along major roads.<sup>14</sup> If the logic of

---

<sup>13</sup> Members of the Security Council occasionally draw up mandates that are prescriptive about the reach of the missions to the region, but in others they simply state that the mission should move into areas where it can have most effect, e.g., UNMISS in South Sudan. Based on an interview with anonymous FCO official, London 2014.

<sup>14</sup> Personal interviews with UN officials, Liberia, June 2011. Pouligny (2006) provides further examples of limited presence of peacekeepers in the countryside.

convenience influences UN PKO deployment, then a third hypothesis can be formulated as follows:

HYPOTHESIS 3: Peacekeepers are more likely to be deployed to areas that are more easily accessible.

The instrumental logic of deployment and the logic of convenience are not necessarily mutually exclusive. In line with official UN rules, conditions on the ground should primarily drive the deployment of a new peacekeeping force as the instrumental logic of deployment suggests. In effect, SRSGs enjoy a certain degree of autonomy in formulating their decisions on the ground. This is the case partly because of their personal credentials and prestige, but also because of the physical distance from the UN headquarters and bureaucracy. Their role in crystallizing decisions on the deployment of forces constitutes to some extent a bottom-up process in shaping UN PKO decisions in future deployments more in line with the instrumental logic of deployment (Karlsrud 2013).

The operational structure of the peacekeeping force can also lead to a blending of the instrumental and convenience logics. When peacekeeping is organized from the capital, the loss-of-strength gradient and other topographical features affect peacekeepers in similar ways as the central government. Boulding's seminal study outlines how the power of actors decays the further away they move from their center, where crucially the loss of power is not measured in absolute terms but relative to the capabilities of the opponent. In other words, the decay of power indicates the ability of centrally based actors to fight specific opponents (Starr 2005:



390). Other factors, such as the topography of the terrain and social and cultural cleavages in a population also affect the decay of power (Buhaug 2010). Similarly, geographical and economic characteristics of different regions within the borders of a state, such as mountainous terrain and limited infrastructure, affect the reach of peacekeepers. Accordingly, we not only test which logic best predicts the actual deployment of peacekeepers but also use multivariate analysis to consider their significance *ceteris paribus*.

### **Research Design**

To evaluate the three hypotheses, we use spatially disaggregated geographic information system (GIS) data on the subnational location of civil war as well as the deployment of peacekeeping forces. The Conflict Site Dataset (CSD) is the source for the subnational civil-war location. CSD is an extension to the UCDP/PRIO Armed Conflicts Dataset and provides coordinates for the conflict zones in given countries (Dittrich Hallberg 2012).<sup>15</sup> The data are particularly useful because they measure the

---

<sup>15</sup> Codebook and data for PRIO Conflict Site 1989-2008 available at:

<http://www.prio.no/Data/Armed-Conflict/Conflict-Site/>. Last accessed 18 August 2014.

“Every conflict-year in the dataset is assigned a circular conflict zone, which is defined by a center point (location), given as latitude and longitude coordinates in decimal degrees, and a radius (scope) indicator that measures the distance from the center point to the most distant point in the conflict zone, rounded upwards to the nearest 50 kilometers [...]. The conflict zone covers the area directly affected by a conflict.” The conflict zone includes “locations of reported armed encounters between the parties to the conflict”, “territories occupied by the rebel side”, and “locations of rebel bases” (Dittrich Hallberg 2011, 2).

local onset and incidence of conflict rather than specific conflict events. Since the conflict data (the key independent variable) are given in grid-year format, our analysis also uses grid years as the unit of analysis.

The location of the deployment of peacekeeping forces is based on UN information and deployment maps. The deployment maps are regularly included in the reports of the Secretary General and provide information on the location of bases, the nature of the contingent deployed and the nationality of the peacekeepers deployed at the bases. After compiling all maps included in the reports, we triangulated the information from the maps with monthly UN data on how many peacekeepers from specific nations were deployed to a particular mission. Accordingly, we estimated how many peacekeepers were deployed to a particular location in a certain period. The resulting estimates were spatially projected, while keeping the variation over time, and merged into the PRIO grids. The dependent variable, *PKO deployment*, is a dummy variable taking the value of 1 if peacekeepers are deployed in a grid in a particular year and 0 if no UN deployment took place in a grid at any point in a particular year.<sup>16</sup>

Our sample encompasses major UN missions in sub-Saharan Africa from 1989 until 2006: The United Nations Observer Mission in Angola (MONUA), the

---

<sup>16</sup> The models presented here use the *onset* of a PKO deployment as dependent variables. We have also used the *incidence* of deployment without any significant changes in our main findings. The PKO deployment is based on UN information about the location of bases and number of peacekeepers deployed to a particular base to *estimate* the terrain covered by peacekeepers. In our opinion, these are the best estimates that can be made from the information made publicly available by the UN.

United Nations Observer Mission in Liberia (UNOMIL), the United Nations Mission in Liberia (UNMIL), United Nations Operation in Burundi (ONUB), the United Nations Observer Mission in Sierra Leone (UNOMSIL), the United National Mission in Sierra Leone (UNAMSIL), the United Nations Organization Mission in the democratic Republic of the Congo (MONUC), United Nations Mission in the Sudan (UNMIS), United Nations Operation in Côte d'Ivoire (UNOCI), and United Nations Mission in the Central African Republic (MINURCA). In several cases, like Angola, Liberia, and Sierra Leone, there is more than one peacekeeping mission with notable temporal and spatial variation. For instance, the analysis for Liberia includes both the United Nations Observer Mission in Liberia (UNOMIL, 1993–1997) and the United Nations Mission in Liberia (UNMIL, from 2003 until 2006). The PKO missions in the sample vary with respect to their deployment size and duration.

The geographic unit of analysis is a grid cell of 0.5 x 0.5 decimal degrees, which at the equator covers an area of roughly 50 x 50 km (Tollefsen Strand and Buhaug 2012). We use yearly observations, since grid-year is becoming the standard analytical unit enabling us to compare not just within but also across countries. Even more important is that some of the main variables of interest have only minimal variation over time; for example, the conflict data are yearly observations (as discussed above). Using a small temporal unit would artificially inflate our sample (Weidmann 2013). Finally, we want to explain deployment as a function of conflict rather than singular conflict events, since we consider it unlikely that the UN bases its decisions on single events.

To test the hypotheses on the spatial location of peacekeeping forces, we analyze the probability that peacekeepers are deployed in a particular area (or grid) as

a function of the level of conflict (lagged) in that area. Hence, we created a panel of grid-years for the eight African countries included in our analysis. To evaluate the instrumental logic, the models include temporal lags of *Conflict* (one and two years), in order to avoid simultaneity and mitigate problems of endogeneity. The models also include the distance of a particular grid from the border and the capital. Conflict lags are dummy variables with the value of 1 if conflict took place in that grid that year and 0 otherwise (Dittrich Hallberg 2012). We use conflict lags as direct proxies for our Hypothesis 1 and note that the location of conflict indeed changes over time. As a further control, the models include *Onset Area* to identify grid cells that hosted the initial battle location for each intrastate conflict (Dittrich Hallberg 2012). *Border* and *Capital Distances* are the proxies for Hypothesis 2, where *Border Distance* is the geographical distance of the center of each grid cell (centroid) from international borders in kilometers and *Capital Distance* the distance in kilometers from the capital (Tollefsen, Strand and Buhaug 2012).

To evaluate the logic of convenience, and in particular Hypothesis 3, we use average traveling time to proxy the feasibility and costs of deploying in a certain area. *Average Traveling Time* gives the estimated cell-average travel time (in minutes) by land transportation from the grid cell to the nearest major city (or urban area) with more than 50,000 inhabitants (Nelson 2008). The values are extracted from a global high-resolution raster map of accessibility. Using data from United Nations Environment Program (UNEP) and the Food and Agricultural Organization (FAO), *Average Mountains* (logged) measures the percentage landmass of the grid that is covered by mountains and measures the roughness of the terrain, as a further proxy for accessibility.

Some further control variables, all defined at grid-year resolution, are included as they are likely to affect subnational deployment, such as *Average Grid Precipitation*, *Population* and *Average Infant Mortality Rate* (based on UNEP and FAO data, Tollefsen, Strand and Buhaug 2012). *Average Grid Precipitation* may also affect accessibility, but is primarily related to agriculture and economic growth in Africa (Miguel, Satyanath and Sergenti 2004). The analysis considers the time that a grid has been without PKO deployment in order to take into account the temporal dependency of the deployment probability. We also use its squared and cubed values (Signorino and Carter 2010). Since the size of the country and therefore the number of the grids vary considerably, the models also control for the total number of grids per country<sup>17</sup>.

### **Empirical Analysis**

INFERENCEAL EVIDENCE      Table 1 compares the two deployment logics using multivariate logit models with clustered errors by country. Table 1 also includes rare-events logit models (King and Zeng 2001) since PKO deployment can be observed in only 5% of the grids. Models 1 and 1A (rare logit estimator) illustrate our three hypotheses controlling only for temporal effects (how long a grid has been without local PKO deployment), whether the grid was in the original onset of the conflict and the number of grids in a country. Models 2 and 3 explore the robustness of the results for Hypothesis 2 given further specifications. The full models, Model 4 (logit estimator) and Model 4A (rare event estimator), evaluate the three hypotheses simultaneously while controlling for additional grid characteristics.

---

<sup>17</sup> The online appendix provides descriptive statistics of all variables (Table 1A).

In support of the first hypothesis, we find that the UN is more likely to deploy peacekeepers to areas with civil war. The models in Table 1 show that there is a higher probability for peacekeepers to be deployed in conflict areas, but we also observe a significant time lag in deployment. The one-year time lag of conflict is insignificant in our models, whereas the two-year conflict lag is consistently significant and correctly signed in all models. We further notice that *Conflict Onset*, i.e., whether the civil war originated in a particular grid, is not statistically significant to explain subnational deployment of peacekeepers.

The support for Hypothesis 2 is mixed. In support of the hypothesis, the UN is indeed more likely to deploy peacekeepers to locations that are closer to the border (*Border Distance*). The negative coefficient for border distance shows that deployment is less likely to take place in grids that are located further from the border. It may also be more likely that peacekeepers are deployed further from the capital. Yet the effect of *Capital Distance* is only marginally significant, and further tests reveal that the effect of neither *Capital* nor *Border Distance* is robust. In Model 3, excluding travel time, distance from capital as well as from international borders loses its significance. Almost invariably, the capital is one of the urban areas used to determine traveling time, which may explain the findings for distance from capital in Models 1, 2 and 4. Further, in the robustness section we highlight that the case of Angola might drive the effect of *Capital Distance* on the probability of the deployment. We considered whether conflict location rather than distance to the borders drives these empirical findings. Note, however, that the models explicitly control for conflict location making this explanation less plausible.

To summarize an instrumental logic thus appears to guide UN missions, but mainly in that the UN deploys to areas with a history of conflict. Further, the strategic importance of border areas and possibly a strategy of the UN to balance the loss-of-strength gradient of the central government may also matter.

[Table 1 about here]

To evaluate the importance of the logic of convenience as outlined in Hypothesis 3, Model 2 focuses on average traveling time from the nearest urban area while excluding distance from the border and the capital as further controls. Model 3 estimates the impact of distance from the capital and the border while excluding average traveling time. Finally, model 4 includes a number of additional controls to measure accessibility of a particular grid cell, namely precipitation, mountainous terrain, infant mortality and population density. Among these additional control variables only the level of infant mortality in a grid reaches statistical significance at standard levels. An increase of one standard deviation of infant mortality in a grid leads to a positive 86% change in odds of local deployment. This suggests that peacekeepers deploy, on average, in economically underdeveloped areas.

We find clear support for the idea that accessibility matters (Hypothesis 3). In all models (Table 1) the average traveling time from the nearest urban area significantly decreases the probability of the onset of UN PKO deployment; an increase of one unit (i.e., just one minute) decreases the odds with 0.4 % and one-standard deviation increase (approximately six hours) decreases the deployment odds with 80%. The effect of traveling time is clearly robust across model specification. Supporting the third hypothesis, the longer it takes to reach a location from any urban

area<sup>18</sup>, the lower the probability of PKO deployment. The finding for average traveling time suggests that, at least to some extent, the logic of convenience may also motivate deployment.

To further illustrate the relevance of traveling time on the probability of UN deployment, Figure 1 compares the marginal effect of traveling time on PKO deployment in conflict areas to the effect on PKO deployment in areas without conflict based on the estimates of Model 4 (Table 1). The black dashed line depicts the marginal effect of the probability of UN deployment in conflict areas, whereas the black line stands for the probability of deployment in areas without conflict. Deployment in conflict areas declines as the traveling time increases, approaching zero when the traveling time exceeds sixteen hours. In areas that have not experienced conflict, the probability of deployment only moderately declines as the cost of traveling time increases, as shown by the slope of dashed line that is much flatter by comparison to the line of the probability of deployment in conflict areas. Deployment to conflict areas becomes statistically indistinguishable from deployment to no-conflict areas if they are more than four hours (approximately) from an urban area. As a further control for accessibility, mountainous terrain is included in Model 4, but the variable turns out to be insignificant.

[Figure 1 about here]

The controls for time are all significant which suggests that time dependencies matter, the longer a grid does not experience local PKO, the lower are the odds that

---

<sup>18</sup> Average traveling time uses the nearest city with more than 50,000 inhabitants as the reference point. Apart from the capital, the reference point generally includes many more urban areas.



peacekeepers will deploy in that grid. However the temporal effects are clearly non-linear since both quadratic and cubic terms of the temporal dependency are statistically significant. As Model 4 (Table 1) shows the inclusion of the control variables does not alter the main findings.

To summarize, the results from the models and the simulations suggest that the deployment of peacekeepers follows the instrumental logic in the sense that the history of conflict matters, albeit with a temporal delay between one and two years. However, the logic of convenience also matters for deployment; even though the UN peacekeepers tend to be deployed in areas that have experienced conflict, the probability of deployment decreases substantially the further from urban areas—including the capital and other major cities—the conflict takes place. Research on civil wars has found that armed confrontations often takes place in areas where the government suffers from a loss-of-strength gradient, in other words, in the periphery of a country. The significant findings for traveling time indicate that peacekeepers are not always deployed to compensate for the relative weakness of the central government.

**ROBUSTNESS OF MAIN FINDINGS**      The results are robust controlling for further country, mission and grid characteristics. We control for the total number of UN peacekeepers deployed in a mission and also the number of countries contributing to the PKO.<sup>19</sup> It is plausible that both variables are correlated with the mandate of a mission and the depth of involvement of the international community (Ruggeri, Gizelis, Dorussen 2013; Hultman, Kathmann and Shannon 2013) and could thus

---

<sup>19</sup> Data from Kathman 2013. Tables in the online appendix.

affect the probability of deployment to particular localities as well. Yet, our results remain substantially the same. Controlling for the presence of a mission supported by regional organizations does not change the results either. Our results also hold when controlling for the existence of a ceasefire agreement.<sup>20</sup>

As a second robustness test, we have used a case-control logit design to compare cells with deployment to a random sample of cells without deployment (King and Zeng 2001). Using a case-control design also “helps to address the problem of spatial correlation across nearby cells, since a smaller random comparison sample is unlikely to include many nearby cells with less additional information” (Buhaug, Cederman and Rød 2011: 827). Randomly resampling the observations, with either excluding 10% or 30% of the zeros, did not change the results.

As a third robustness check, observations were resampled in order to exclude ‘irrelevant grids’, namely grids with a very low probability of conflict. Model 1 in Table 2 shows that only including grids with a probability of conflict greater than 10% does not affect the main findings.<sup>21</sup> Even including only extreme cases—with a probability of conflict larger than 50%—does not lead to any significant changes in the effects of the main explanatory variables.<sup>22</sup>

[Table 2]

---

<sup>20</sup> Data from Hultman, Kathman and Shannon (2013). Table 3A in the online appendix.

<sup>21</sup> Conflict probability of grid estimated as:  $\Pr(\text{Conflict}) = f(\text{Average Traveling Time, Borders Distance, Capital Distance, Infant Mortality, Mountains, Population, Years Grid at Peace, Years Grid at Peace}^2, \text{Years Grid at Peace}^3)$ .

<sup>22</sup> Results not reported here but available on request.

Even though all models control for country size (number of grids), it is still possible that the effects of geographical factors are conditional on country size. To put it differently, traveling time and distance could affect deployment differently in larger countries, such as Angola or DRC, compared to smaller countries such as Burundi or Sierra Leone. When we include dummy variables for the large countries (DRC, Angola and Sudan), the results hold. Furthermore, we ran models in which the geographical variables (that is, *Average Traveling Time*, *Border Distance*, *Capital Distance*) interact with a dummy for small versus large countries. Table 2 (Model 2) provides some evidence that the effect of geography on deployment is conditional on country size: distance matters for large countries, such as Angola and DRC, but not necessarily for small ones, for instance Burundi and Sierra Leone. Finally, we followed a Jackknife procedure, and the results are largely robust for the exclusion of each of the eight cases. It is noteworthy that Angola might drive the effect of the variable *Capital Distance* on the probability of the deployment<sup>23</sup>.

Our results are based on information about the location of conflict areas extracted from the PRIO conflict site-data (Dittrich Hallberg 2012; Tollefsen Strand and Buhaug 2012). However, as a further test for the robustness of our findings, we use the UCDP-GED data (Sundberg and Melander 2013) as an alternative. This dataset provides longitude, latitude and date of conflict events, which we use to compute for every single grid whether there were any conflict events in a particular year. The two-year lag of the alternative operationalization gives results that are similar to the ones presented here.<sup>24</sup>

---

<sup>23</sup> See Table 4A in online appendix.

<sup>24</sup> Results not reported here but available on request.

Finally, for the large countries we have run models with spatial lags of the PKO deployment in order to take into account possible correlation across space. In this case, we find more substantial results with possible spatial diffusion patterns (see Beardsley and Gleditsch 2015). We have computed the inverted distance interdependence matrix based on the presence of peacekeepers as well as the presence of peacekeepers weighted by the size of the deployment. Figure 2 reports graphically the coefficients of the two main variables in these three models when controlling for these spatial lags.<sup>25</sup> Figure 2 shows the empirical support for Hypothesis 1, conflict, and Hypothesis 3, travelling distance. The effects stay substantially the same as in Model 4,<sup>26</sup> moreover we find that the probability of deployment in a grid is positively affected by the nearby presence of peacekeepers in previous years.<sup>27</sup>

[Figure 2]

In order to check for multi-collinearity we have run the diagnostic test of variance inflation factor (VIF). The explanatory variables are all above the tolerance threshold, and multi-collinearity of the explanatory variables should not affect our results.

---

<sup>25</sup> Full tables with spatial lags are in online appendix, Table 5A. The results also hold controlling for conflict spatial lags.

<sup>26</sup> Notice that the point estimates for *Travelling Distance* are always statistically significant.

<sup>27</sup> We have run temporal-spatial lags to avoid bias because of simultaneity. Moreover since we aim to model possible diffusion, temporal dynamics are as important as spatial ones. Accordingly, we ran models with also the spatial lags lagged one year. The results hold in these models as well.

illustrate the main findings, we consider in greater detail the location and the size of the peacekeeping forces in Sierra Leone, one of the eight African countries included in the empirical analysis. Figure 3 contrasts the size of UN deployment outside the capital<sup>28</sup> with the size of UN deployment in the capital for the UNOMSIL and UNAMSIL peacekeeping missions. The solid line indicates the size of deployment in the capital, whereas the dotted line represents the size of the UN mission to the rest of the country. The missions to Sierra Leone are interesting because they exhibited both logics at different points. The logic of convenience is evident in the first period until September 2000 where the mission was understaffed, underfunded, and in organizational disarray. From September of 2000 a series of events led to a dramatic restructuring of the mission.

[Figure 3 about here]

Following the adoption of Security Council Resolution 1270, UNAMSIL was established to replace the previous observer mission UNOMSIL already in 1999. Unlike its predecessor, UNAMSIL included armed troops to be deployed throughout the country (Olonisakin 2008). Initial planning was based on a sharing of peacekeeping tasks with troops from the Economic Community of West-African States Monitoring Group (ECOMOG) already present in the country. The Revolutionary United Front (RUF) was perceived as largely pacified and as no longer posing a serious threat (Olonisakin 2008: 62-63). Initially, the Security Council

---

<sup>28</sup> In this section, we focus on deployment to the capital for ease of exposition. Note that in the previous analysis average traveling time is measured from any place with more than 50,000 inhabitants and not just the capital of a country.

approved a force of 6,000 troops with the expectation that ECOMOG forces would remain in the Northern and Eastern provinces controlled by the RUF at that time. When the departure of the Nigerian forces from ECOMOG left the UN forces without any significant presence in the rebel areas, the Security Council approved to increase the UN force to 11,000 military personnel. The build-up was however slow and could not support entering deeply into rebel-controlled areas (Olonisakin 2008). Contributing countries, such as Zambia, became increasingly dissatisfied with how their national forces were deployed as more of their troops were engaged in direct fights and the RUF succeeded in taking peacekeepers as hostages. Moreover, any troops deployed to crisis areas lacked sufficient logistic support and were left without basic knowledge of the terrain (such as proper maps). Although the (slow) deployment into conflict zones may suggest an instrumental logic, the peacekeepers missed the support needed to be effective. In line with the logic of convenience, countries contributing to the mission interpreted the rules of engagement differently and were reluctant to forcefully confront the RUF (Olonisakin 2008). They also retained direct control over the deployment of their contingencies further diminishing the ability of the UN forces to attain a robust presence in rebel-held areas.

The fate of UNAMSIL was turned around when the USA, led by Holbrooke as the Permanent Representative to the UN, and Great Britain provided the necessary financial support and political backing for a dramatic increase in number of troops and logistic support. The mission reached 17,500 military personnel at its peak. It was one of the most expensive and largest missions at the time. Moreover, Security Council Resolution 1346 provided the mandate for UN troops to use force against the threat of RUF. The additional resources, the restructuring of the leadership of the

mission, and the efforts to homogenize the rules of engagement across all contingencies contributed to a stronger and better-equipped force that was able to enter all RUF controlled areas (Olonisakin 2008). In the spring and summer of 2001 UNAMSIL deployed forces in the Northern and Eastern Provinces and established headquarters in key conflict areas such as Yengema, a diamond-mining town in the Kono district (UNAMSIL 2001). Figure 3 shows that the build-up of UNAMSIL forces was nearly exclusively outside of the capital Freetown.

### **Final Remarks**

Where do peacekeepers go? We know that overall UN peacekeeping operations tend to choose hard cases to intervene, namely countries that have experienced long and violent civil wars. However, a full answer to the question requires looking beyond the country level and using disaggregated information on UN peacekeeping subnational deployment. Do peacekeepers actually go to locations where conflict is observed or do they tend to concentrate in the capital or areas that are far away from the actual conflict?

On the basis of geo-referenced deployment and conflict data, we show that the UN peacekeepers go where the conflict is located, but with a substantial temporal delay. A possible interpretation for the temporal delays is that the UN peacekeeping forces, even though inspired by an instrumental logic, are trapped in logistic or bargaining dynamics. Regardless, peacekeepers do not appear to be proactive able to deploy quickly in areas where conflict diffuses. Further, even though the peacekeepers go to areas that have experienced conflict, they still shy away from

conflict areas located far from urban areas. This suggests potential selection bias in where UN forces are deployed within a country, even if the country as whole can be classified as a ‘hard case.’

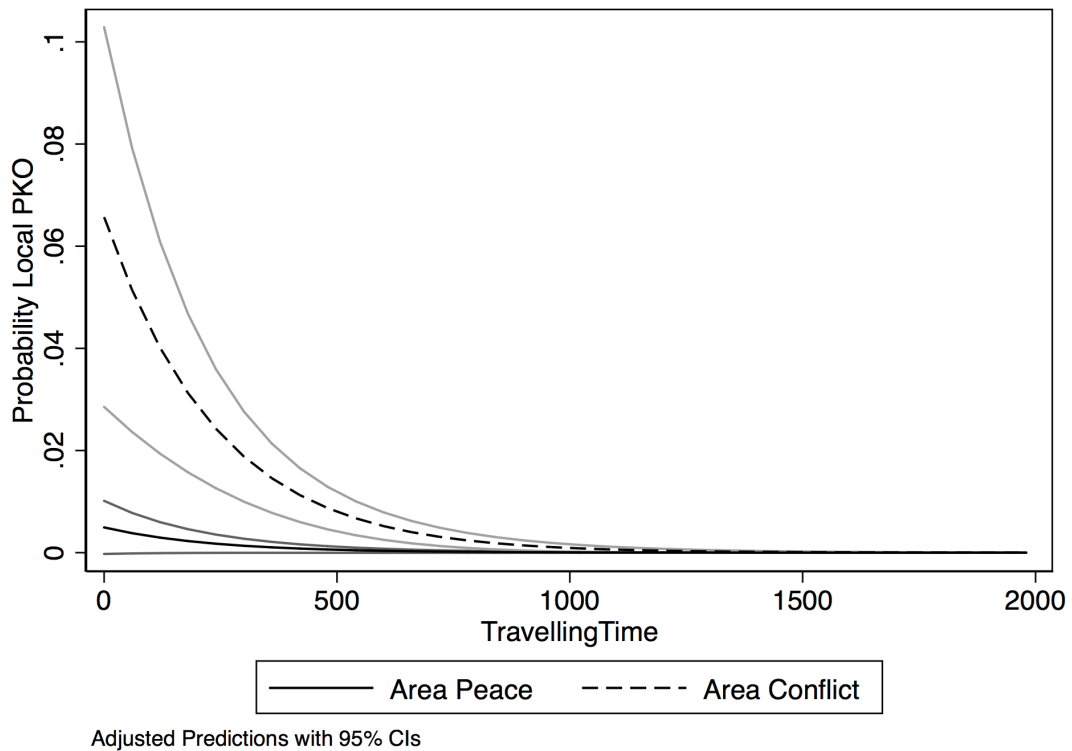
Overall, we interpret our findings to indicate that an instrumental logic best describes the deployment of UN peacekeepers, but that (at least in large countries) it is mitigated by ‘convenience’. Three underlying mechanisms may explain this empirical pattern. The first possibility is that logistic constraints cause the time delay of deployment to conflict areas. These constraints are interacting with the operational capacity and the given rules of engagement of the contributing forces. Alternatively, as Autesserre (2010) argues, the pattern of deployment could reflect the relative insensitivity of the UN to local grievances and feuds that often fuel conflict. A final possibility is that developments on the ground affect attitudes towards risk. Prospect theory suggests that actors become more risk-acceptant if they fear losses relative to the status quo, while they are more risk-averse with respect to gains from the status quo (Kahneman and Tversky 1979). If so, the instrument logic should be more relevant if the situation on the ground is deteriorating, while the logic of convenience should apply more to improving (or static) situations. Current data do not allow us to explore these lines of thought more fully, and we have to leave it for future research.

Another further line of inquire is the impact of our findings on the evaluation of the impact of peacekeeping. Even though there is evidence that the UN deployment tends to follow the conflict, the finding that peacekeeping deployment seems at least partially motivated by a logic of convenience strongly suggests that the evaluation of its effectiveness needs to take in account possible subnational selection bias.



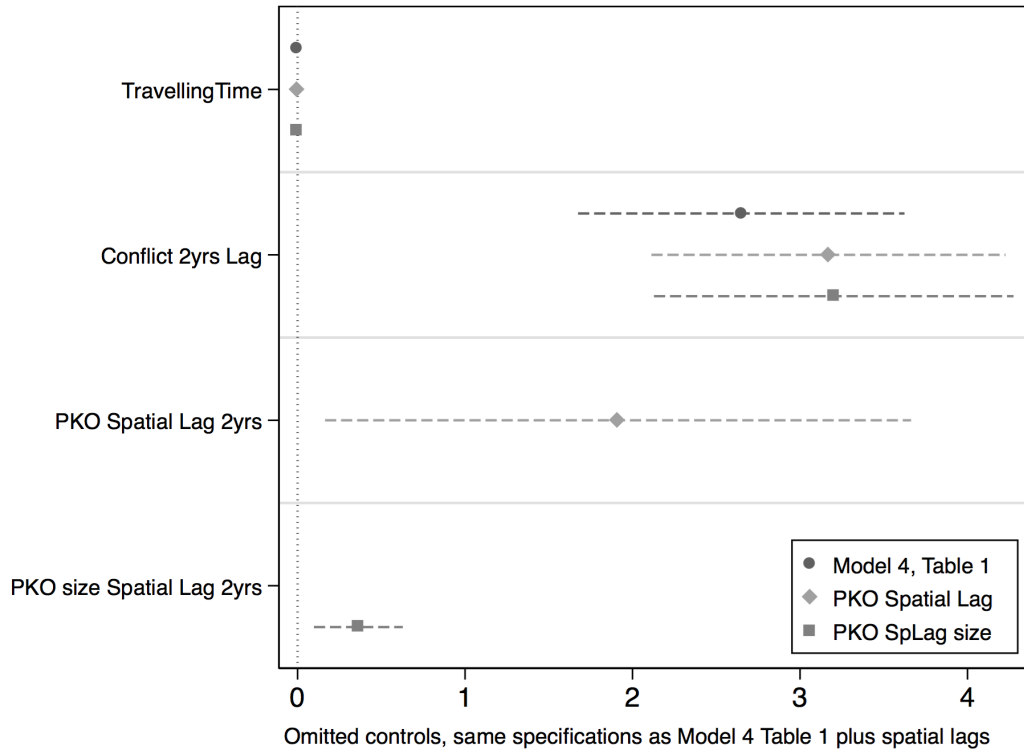
# On the Frontline Every Day? Subnational Deployment of United Nations Peacekeepers

## TABLES & FIGURES



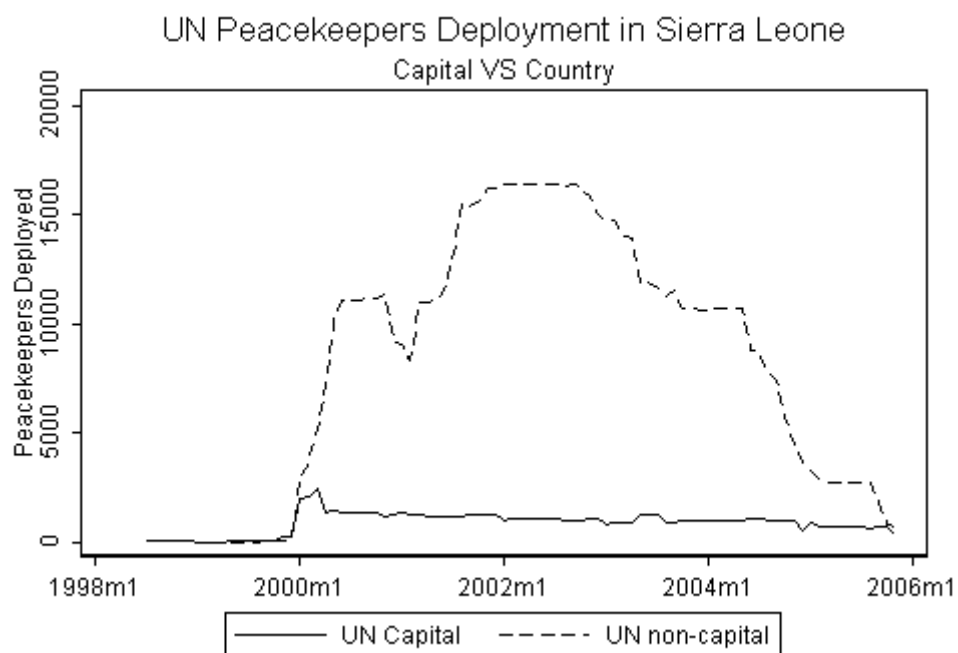
**Figure 1: Probability of Deployment in Conflict Areas vs. Areas with no Conflict**

Notes: solid line indicates effect in conflict area; the dashed line indicates effect in areas without conflict. The grey dashed lines give the 95% confidence intervals.



**Figure 2: Probability of Deployment Controlling for Spatial Effects**

Notes: The grey dashed lines give the 95% confidence intervals.



**Figure 3: Comparison of Deployment of Peacekeepers to the Capital, Freetown, and Outside the Capital (UNOMSIL & UNAMSIL, Sierra Leone)**

**Table 1: Subnational Deployment of UN Peacekeepers in Africa, 1989-2006**

Onset Grid PKO		Model 1 Logit	Model 1 A Rare Logit	Model 2 Logit	Model 3 Logit	Model 4 Logit	Model 4 A Rare Logit
H1	1yr lag Conflict Area	0.571	0.545	0.272	-0.149	-0.030	-0.057
		0.326	0.325	0.338	0.348	0.364	0.363
	2yrs lag Conflict Area	2.649***	2.566***	2.471***	2.403***	3.137***	3.034***
		0.600	0.599	0.604	0.572	0.719	0.718
H2	Border Distance	-0.003***	-0.003***		-0.001	-0.004***	-0.004***
		0.001	0.001		0.001	0.001	0.001
	Capital Distance	0.001*	0.001*		-0.000	0.001*	0.001*
		0.000	0.000		0.000	0.000	0.000
H3	Average Travelling Time	-0.004***	-0.004***	0.004***		-0.004***	-0.004***
		0.001	0.001	0.001		0.001	0.001
	Time Grid Without PKO Deployment	-7.793***	-7.629***	7.280***	-7.171***	-9.140***	-8.890***
		1.908	1.906	1.776	1.542	2.198	2.194
	Time Grid Without PKO Deployment 2	1.785***	1.743***	1.645***	1.604***	2.081***	2.018***
		0.486	0.486	0.446	0.390	0.553	0.552
	Time Grid Without PKO Deployment 3	-0.121**	-0.118**	-0.111**	-0.109***	-0.140***	-0.136***
		0.037	0.037	0.034	0.030	0.041	0.041
	Conflict Onset Area	0.444	0.639	0.720	0.868	-0.004	0.159
		0.977	0.976	0.869	0.736	1.159	1.157
	No. Of Grids per Country	-0.002***	-0.002***	-0.002**	-0.002*	-0.001	-0.001
		0.001	0.001	0.001	0.001	0.001	0.001
	Average Grid Precipitation					0.000	0.000
						0.000	0.000
	Average Mountains (%)					0.459	0.465
						0.427	0.427
	Average Adj. Infant Mortality Rate					0.039***	0.038***
						0.011	0.011
	Population Cell 2000					0.308	0.360
						0.225	0.224
	Constant	5.951**	5.890**	5.204**	4.131**	0.757	0.751
		1.907	1.905	1.720	1.479	2.385	2.381
	AIC	862.317		884.405	967.618	806.691	
	ROC	0.8787		0.8690	0.8045	0.8843	
	χ <sup>2</sup>	226.46		217.92			
	Observations	8687	8687	8687	8687	8507	8507

Robust standard errors

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 2: Subnational Deployment of UN Peacekeepers, Robustness Checks**

Rare Logit Regressions	Only Grids Pr. Conflict > 10%	Geographical Variables and Country Size
Average Travelling Time	-0.004*** (0.001)	
Border Distance	-0.004*** (0.001)	
Capital Distance	0.001*** (0.000)	
Large Country x Average Travelling Time		-0.004*** (0.001)
Small Country x Average Travelling Time		-0.004 (0.003)
Large Country x Border Distance		-0.005*** (0.001)
Small Country x Border Distance		-0.002 (0.004)
Large Country x Capital Distance		0.001** (0.000)
Small Country x Capital Distance		-0.002 (0.002)
1yr lag Conflict Area	0.122 (0.398)	-0.087 (0.371)
2yrs lag Conflict Area	3.027*** (0.859)	2.975*** (0.705)
Time Grid Without PKO Deployment	-9.380*** (2.212)	-8.341*** (1.750)
Time Grid Without PKO Deployment 2	2.137*** (0.556)	1.889*** (0.445)
Time Grid Without PKO Deployment 3	-0.143*** (0.041)	-0.127*** (0.033)
Conflict Onset Area	0.188 (1.221)	0.254 (1.115)
No. Of Grids per Country	-0.002* (0.001)	-0.001 (0.001)
Average Grid Precipitation	0.000 (0.000)	0.000 (0.000)
Average Mountains (%)	0.483 (0.448)	0.454 (0.414)
Average Adj. Infant Mortality Rate	0.030** (0.012)	0.041*** (0.009)
Population Cell 2000	0.288 (0.250)	0.364 (0.235)
Constant	2.630 (2.598)	
Observations	7281	8507

Robust standard errors in parentheses

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

## References

- ANDERSSON, ANDREAS. (2000) Democracies and UN peacekeeping operations, 1990–1996. *International Peacekeeping* 7 (2):1–22.
- AUTESERRE, SÉVERINE. (2010) *The Trouble with the Congo Local Violence and the Failure of International Peacebuilding*. Cambridge, Mass.: Cambridge University Press.
- BARNETT, MICHAEL N. (1997) The UN Security Council, Indifference, and Genocide in Rwanda. *Cultural Anthropology* 12(4): 551-578.
- BARNETT, MICHAEL N. AND MARTHA FINNEMORE. (1999) The Politics, Power, and Pathologies of International Organizations. *International Organization* 53(4): 699-732.
- BEARDSLEY, KYLE, AND KRISTIAN S. GLEDITSCH. Peacekeeping as Conflict Containment. *International Studies Review* 17.1 (2015): 67-89.
- BEARDSLEY, KYLE, AND HOLGER SCHMIDT. (2012) Following the Flag or Following the Charter?: Examining the Determinants of UN Involvement in International Crises, 1945-2002.' *International Studies Quarterly* 56(1): 33–49.
- BOULDING, KENNETH E. (1962) *Conflict and Defense*. New York, N.Y.: Harper and Row.
- BOVE, VINCENZO, AND ANDREA RUGGERI. (2015) Kinds of blue: diversity in UN peacekeeping missions and civilian protection. *British Journal of Political Science* forthcoming.
- BUHAUG, HALVARD. (2010) Dude, Where's My Conflict? LSG, Relative Strength, and the Location of Civil War. *Conflict Management and Peace Science* 27(2): 107–28.
- BUHAUG, HALVARD, LARS-ERIK CEDERMAN, AND JAN K. RØD. (2008) Disaggregating Ethno-Nationalist Civil Wars: A Dyadic Test of Exclusion Theory. *International Organization* 62(3): 531–51.
- BUHAUG, HALVARD, SCOTT GATES, AND PÄIVI LUJALA. (2009) Geography, Rebel Capability, and the Duration of Civil Conflict. *Journal of Conflict Resolution* 53(4): 544–69.

- BUHAUG, HALVARD, KRISTIAN S. GLEDITSCH, HELGE HOLTERMANN, GUDRUN ØSTBY, AND ANDREAS F. TOLLEFSEN. (2011) It's the Local Economy, Stupid! Geographic Wealth Dispersion and Conflict Outbreak Location. *Journal of Conflict Resolution* 55(5): 814–40.
- CARTER, TIMOTHY A. (2007) United Nations intervention decisions: a strategic examination. Working Paper. Detroit, Mich.: Department of Political Science, Wayne State University.
- CEDERMAN, LARS-ERIK, NILS B. WEIDMANN, AND KRISTIAN S. GLEDITSCH. (2011) Horizontal Inequalities and Ethno-nationalist Civil War: A Global Comparison. *American Political Science Review* 105(3): 478–95.
- COSTALLI, STEFANO. (2014) Does Peacekeeping Work? A Disaggregated Analysis of Deployment and Violence Reduction in the Bosnian War”, *British Journal of Political Science* 44(02), 357-380.
- CUNLIFFE, PHILIP. (2009). The Politics of Global Governance in UN Peacekeeping. *International Peacekeeping* 16(3): 323-336.
- DITTRICH HALLBERG, JOHAN. (2012) PRIO Conflict Site 1989-2008: A geo-referenced dataset on armed conflict. *Conflict Management and Peace Science* 29(2): 219–32.
- DE JONGE OUDRAAT, CHANTAL. (1996) The United Nations and Internal Conflict. In *The International Dimensions of Internal Conflict*, edited by Michael E. Brown, 489–535. Cambridge, Mass: MIT Press.
- DORUSSEN, HAN, AND THEODORA-ISMENE GIZELIS. (2013) Into the Lion's Den: Local Responses to UN Peacekeeping. *Journal of Peace Research*, 50(6): 693-708.
- DORUSSEN, HAN, AND ANDREA RUGGERI. (2007) Introducing PKOLED: A Peacekeeping Operations Location and Event Dataset. Manuscript , University of Essex.
- DOYLE, MICHAEL W., AND NICHOLAS SAMBANIS. (2006) *Making War and Building Peace. United Nations Peace Operations*. Princeton, N.J.: Princeton University Press.
- FINDLAY, TREVOR. (2002) *The Use of Force in UN Peace Operations*. Oxford, UK: Oxford University Press.

- FORTNA, VIRGINIA P. (2008) *Does Peacekeeping Work?* Princeton, N.J.: Princeton University Press.
- HOWARD, LISE MORJÉ. (2008) *UN Peacekeeping in Civil Wars*. Cambridge: Cambridge University Press.
- HULTMAN, LISA. (2013) UN Peace Operations and Protection of Civilians: Cheap Talk or Norm Implementation?. *Journal of Peace Research* 50(1): 59-73.
- HULTMAN, LISA, JACOB KATHMAN AND MEGAN SHANNON. (2013) United Nations Peacekeeping and Civilian Protection in Civil War. *American Journal of Political Science* 57(4): 875-91.
- HUMAN RIGHTS WATCH (2008) Killings in Kiwanja: The UN's Inability to Protect Civilians. Human Rights Watch:  
<http://www.hrw.org/en/reports/2008/12/11/killings-kiwanja?print> (accessed on 02/11/2010).
- GIBBS, DAVID N. (1997) Is peacekeeping a new form of imperialism? *International Peacekeeping* 4(1):122–28.
- GILLIGAN, MICHAEL AND STEPHEN J. STEDMAN. (2003) Where do Peacekeepers Go? *International Studies Review* 5(4):37–54.
- JAKOBSEN, PETER V. (1996) National Interest, Humanitarianism or CNN: What triggers UN Peace Enforcement after the Cold War? *Journal of Peace Research* 33(2): 205–15.
- KAHNEMAN, DANIEL, AND AMOS TVERSKY. (1979). Prospect Theory: An Analysis of Decision under Risk. *Econometrica* 47(2): 263-91.
- KALYVAS, STATHIS N. (2006) *The Logic of Violence in Civil War*. Cambridge, Mass: Cambridge University Press.
- KALYVAS, STATHIS N. (2008) Promises and pitfalls of an emerging research program: the microdynamics of civil war. In: *Order, Conflict, and Violence*, edited by Stathis N. Kalyvas, Ian Shapiro and Tarek Masoud, 397–421. Cambridge, Mass: Cambridge University Press.
- KARLSRUD, JOHN. (2013) Special Representatives of the Secretary-General as Norm Arbitrators? Understanding Bottom-up Authority in UN Peacekeeping. *Global Governance* 19(4): 525-44.



- KATHMAN, JAKOB D. (2013). United Nations peacekeeping personnel commitments, 1990–2011. *Conflict Management and Peace Science*, 30(5), 532-549.
- KING, GARY, AND LANGCHE ZENG. (2001) "Logistic regression in rare events data." *Political analysis* 9.2 (2001): 137-163.
- MIGUEL, EDWARD, SHANKER SATYANATH, AND ERNEST SERGENTI. (2004)"Economic shocks and civil conflict: An instrumental variables approach." *Journal of Political Economy* 112(4 ): 725-753
- NELSON, ANDREW. (2008). Travel Time to Major Cities: A Global Map of Accessibility. Brussels, Belgium: European Commission.  
<http://forobs.jrc.ec.europa.eu/products/gam/>
- OLONISAKIN, FUNMI. (2008) *Peacekeeping in Sierra Leone: The Story of UNAMSIL*. Boulder and London: Lynne Reinner
- POULIGNY, BÉATRICE. (2006) *Peace Operations Seen from Below: UN Missions and Local People*. London: Kumerian Press.
- POWERS, MATTHEW, BRYCE W. REEDER, AND ASHLY ADAM TOWNSEN. (2015) Hot Spot Peacekeeping. *International Studies Review*, 17: 46-66
- PRODI, Romano (2009). General Assembly/Security Council. A /64/359–S/2009/470  
<http://www.securitycouncilreport.org/atf/cf/%7B65BF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/RO%20S2009%20470.pdf> [Accessed on 01 November 2015].
- RALEIGH, CLIONADH AND HÅVARD HEGRE. (2009) Population Size, Concentration, and Civil War: A Geographically Disaggregated Analysis. *Political Geography* 28(4): 224–38.
- RUGGERI, ANDREA, THEODORA-ISMENE GIZELIS, AND HAN DORUSSEN. (2013) Managing Mistrust: an Analysis of Cooperation with UN Peacekeeping in Africa. *Journal of Conflict Resolution* 57(3):387-409.
- SIGNORINO, CURTIS S., AND DAVID B. CARTER. (2010) Back to the Future: Modeling Time Dependence in Binary Data. *Political Analysis* 18(3): 271–92.
- STARR, HARVEY. (2005) Territory, Proximity, and Spatiality: The Geography of International Conflict. *International Studies Review* 7(3): 387–406.
- SUNDBERG, RALPH, AND ERIK MELANDER, (2013) Introducing the UCDP Georeferenced Event Dataset. *Journal of Peace Research* 50(4):523-532

- TOLLEFSEN, ANDREAS, HÅVARD STRAND, AND HALVARD BUHAUG. (2012). PRIO-GRID: A unified spatial data structure. *Journal of Peace Research* 49(2):363–74.
- TOWNSEN, ASHLY A., AND BRYCE W. REEDER. (2014). Where Do Peacekeepers Go When They Go? Explaining the Spatial Heterogeneity of Peacekeeping Deployment. 18: 69-91.
- WALLENSTEEN, PETER, AND MARGARETA SOLLENBERG. (2001). Armed Conflict 1989–2000. *Journal of Peace Research* 38(5): 629–644.
- WEIDMANN, NILS. (2009) Geography as Motivation and Opportunity Group Concentration and Ethnic Conflict. *Journal of Conflict Resolution* 53(4): 526–43.
- WEIDMANN, NILS. (2013) The Higher the Better? The Limits of Analytical Resolution in Conflict Event Datasets. *Cooperation and Conflict* 48(4): 567-576.