Peacekeeping Deployments and Mutinies in African Sending States

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Research on host-country effects of peacekeeping deployments has highlighted destabilizing consequences for contributing states, suggesting that deployments can increase the willingness and ability of soldiers to mutiny or attempt coups. Yet others expect peacekeeping contributions can bring a variety of benefits, including improved civilian control of the armed forces. We reconcile these conflicting assessments in two ways. First, we identify important differences across peacekeeping organizations. Missions undertaken by the UN are generally better funded and equipped, invoke selection criteria that should produce fewer grievances than missions operated by regional organizations, and may be more risk averse. The benefits or hazards of peacekeeping can thus vary substantially, leading to different consequences for organizations. Second, the pros and cons of peacekeeping can incentivize mutinies and coups differently. When grievances are present, financial incentives of peacekeeping may prompt soldiers to prefer mutiny over coups to avoid being disqualified from future participation. We assess these expectations for African states’ participation in UN and non-UN peacekeeping operations from 1990-2011. We find no evidence that UN peacekeeping deployments increase mutiny risk, while non-UN deployments have a positive effect on the occurrence of mutiny. These findings remain robust across a large number of model specifications.

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Introduction

The close of the Cold War brought a number of transformative changes to politics of the developing world. This was particularly true for Africa, a continent plagued by superpower proxy wars, stagnant economic prospects, near-universal authoritarian rule, and a number of new or ongoing civil wars. Attempting to remedy the latter, the international community increased the number of peacekeeping operations (PKOs) on the continent in the 1990s. Accompanying this growth was a shift toward peacekeepers from the developing world, and by 2017 approximately half of all United Nations peacekeepers were from Africa (de Coning 2017).

Scholars have since tried to analyze the efficacy of these missions, with an almost exclusive focus on their impact on host states. Positive assessments point to peacekeeping reducing the likelihood of conflict recurrence, reducing conflict contagion, lowering civilian and battlefield deaths, and reducing post-conflict civilian victimization (Fortna 2004, 2008; Doyle and Sambanis 2006; Gilligan and Sergenti 2008; Beardsley 2011; Hultman et al 2013, 2014; Ruggeri et al 2013; Kathman and Wood 2015; Di Salvatore 2018). However, these missions have not been without setbacks, and some scholars have been more skeptical regarding their utility. More pessimistic assessments have noted the mixed results of missions, while others point to peacekeepers having been implicated in a variety of scandals, including the trafficking of guns, drugs and people, participation in transactional sex and sexual abuse, theft, murder, and the compounding negative effects of a lack of female representation among peacekeepers (Autesserre 2009, 2010; Murdie and Davis 2010; Beber et al 2017; Karim and Beardsley 2017).

Far less attention has been given to the impact of peacekeeping on the peacekeepers themselves, or on their countries of origin. The few country-specific analyses that exist have both lauded and criticized these impacts. Some have pointed to a range of benefits for providing
peacekeepers, including an increase in professionalism, prestige, force modernization, the creation of external missions, providing both organizational and individual financial perks, and reducing the likelihood of military coups (e.g., Moskos 1976; Erskine 1989; Norden 1995; Worboys 2007; Martínez and Durán 2017; Lundgren 2018). Others, meanwhile, have suggested that peacekeeping can have a detrimental influence, including boosting the willingness of the armed forces to act as an arbiter during civilian political crises, increasing the grievances of the armed forces, and consequently increasing the likelihood of military coups or mutinies (Scobell 1994; Velázquez 2010; Dwyer 2015b, 2017; Cunliffe 2013, 2018).

Prior literature has thus reached vastly different conclusions regarding the impact of peacekeeping on states providing soldiers. It has provided rich details regarding specific cases but has usually given little attention to generalizing to the larger practice of peacekeeping. First, this literature has frequently selected on the dependent variable—whether it be a “good” or “bad” outcome—and has omitted alternative explanations for civil-military strains, including not accounting for prior civil-military legacies. Prior legacies have been noted as an important influence on both the decision to provide peacekeepers and the occurrence of military interventions into government. Second, assessments have pointed to the impact of specific grievances that are often not consistent across missions, and have failed to consider that soldiers deployed domestically may harbor similar grievances. In related work on peacekeeper misconduct, Horne and colleagues (2019) find that the behavior of military forces at home predicts behavior when deployed, highlighting the importance of considering domestic conditions. Finally, prior literature has looked at a range of manifestations of military insubordination, with little attention given to how differences in the dependent variable could influence the analysis. We argue this is especially important when distinguishing mutinies from coups d’état, as the former acts as an attempt to get an incumbent regime to change a policy or acknowledge a problem, while the latter acts to remove the incumbent.
Our article addresses these issues in two ways. First, we consider variations in mission characteristics by assessing the influence of participation in both United Nations and non-UN peacekeeping missions. Regional peacekeeping organizations, including the AU and ECOWAS, relative to UN missions, suffer greater funding and materiel shortfalls, and operate under broader and more hazardous mandates. Second, we argue that while peacekeeping may increase grievances among soldiers, participation in PKOs can also incentivize soldiers to avoid taking action that would risk voiding those privileges (i.e., stage a coup). Our theory and analyses ultimately focus on military mutinies. Our analyses suggest no evidence for a mutiny-inducing effect for UN PKO participation, while participation in non-UN PKOs significantly increases the likelihood of mutiny.

**Peacekeeping as a Hazard to Civilian Control**

*Peacekeeping as a Source of Grievance*

Deployment to combat zones can introduce a number of hardships to the lives of soldiers. In some cases, hardships can be exacerbated by perceptions of mistreatment. In an in-depth investigation of Economic Community of West African States Monitoring Group (ECOMOG) missions, Olonisakin (2000) details numerous problems faced by peacekeepers. These problems, perhaps unsurprisingly, have been argued to lead to mutinies. Leading in this regard is the recent work of Dwyer (2015a, 2015b, 2015c, 2017), who interviewed soldiers and mutineers in various West African states. Dwyer’s assessment of 22 countries ultimately points to three areas in which peacekeeping can prompt mutinies via grievances, each of which closely aligns with common problems discussed by Olonisakin and others.

First, peacekeeping introduces material grievances, often in the form of pay. Allowances are often delayed and sometimes absent. When paid on time, soldiers sometimes conclude that compensation is not sufficient for the danger and harm incurred. Interactions with soldiers from other contingents can also reveal substantial variation in compensation.
Second, soldiers compare their living conditions and safety to that of senior officers within their own organizations and often determine they are being unfairly treated. Further, soldiers sometimes believe that their officers are getting rich either by profiteering or, more bluntly, by “robbing them” (Dwyer 2015a, 216). Third, peacekeepers are often sent to countries still in open conflict. The hardships related to deployment have the ability to dampen morale even in “easier” cases. Nigerian troops in Liberia, for example, arrived without boots or uniforms, items which were reportedly even provided by rebel leader Prince Johnson in one case (Olonisakin 2000, 179). More generally, logistical shortcomings can undermine everything from receiving meals to combat readiness. Further, rotations are often long and sometimes extended without prior knowledge or permission of soldiers.

*Peacekeeping as a Source of Military Capacity*

Others have argued that the practice can increase the ability of soldiers to rebel against their governments. We identify two strands of these arguments, which we broadly consider under the umbrella of institutional capacity. First, participation in peacekeeping missions is argued to legitimize the military as an actor in domestic politics. For example, Siegel and Feast (2014) argue that Fijian politics in particular were complicated by the return of peacekeepers who demanded a “greater role in the running of the country.” This view is shared by former Fijian Colonel Jone Baledrodroka, who led his country’s peacekeeping forces and acted as the commander of Fiji’s Land Forces. Baledrodroka argues the Fijian military’s ongoing participation in peacekeeping “has given the military an inflated corporate image that now manifests itself in mediating in political conflict” (2012, 132). More relevant to our emphasis on Africa, Khadiagala (1995) questioned whether Nigeria’s indispensable role in ECOMOG

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2 The leader of Fiji’s first coup, Lt. Colonel Rabuka, had even written a master’s thesis on the role of the military in post-coup situations long before Fiji was a player in the peacekeeping game (Scobell 1994).
successes in the early and mid-1990s might allow the armed forces to retain an important political voice during Nigeria’s presumptive return to civilian rule.

Second, the training for—and experiences with—peacekeeping can increase the fighting capacity of the military relative to the government. Returning to the Fijian case, Baledrokadroka (2012) lamented that it was UN peacekeeping missions that had given the army the specific “tools” needed for intervention. Savage and Caverley (2014) recently speculated that human capital investments gained through peacekeeping can lead to regime challenges by newly resourced soldiers. They find that countries that have contributed to peacekeeping missions are more likely to see irregular transfers of power.

Illustrating the capacity argument, leaders do in fact deliberately deploy soldiers with the goal of improving military capacity. This has been undertaken by stable countries, such as Chile in the early 2000s, which saw peacekeeping as a shortcut to the modernization of its armed forces (Janes Defence). Similar incentives have been noted for countries that are trying to deal with domestic security threats. Uganda’s 3rd Battalion, for example, was deployed internally against rebels within one week of completing the American training regimen under the auspices of the African Crisis Response Initiative (ACRI) (Omach 2000).

**Peacekeeping as a Boost to Civilian Control**

A range of evidence suggests that the decision to contribute to peacekeeping missions is commonly influenced by factors that are associated with civil-military strains, and that peacekeeping itself is frequently pursued as a potential solution for those strains (Gaibulloev et al 2009; Victor 2010; Bove and Elia 2011; Bellamy and Williams 2013). In this section, we illustrate a number of purported determinants of peacekeeping contributions, focusing on deployments from developing states. We illustrate how these processes likely bias a sample of peacekeepers toward countries with poor civil-military legacies and indicate the potential
positive benefits participation can provide. This review suggests that a peacekeeping-mutiny link could be driven less by PKO involvement and more by a culmination of prior legacies.

First, increasing one’s commitment to foreign missions as a way to improve civilian control of the military has been noted in the more general international relations literature. Huntington (1991) advised democratizing states to give their soldiers “toys” and a foreign mission on which to focus. Desch (2001) similarly suggested civil-military relations would benefit from external missions to distract the military from domestic politics. Kisangani and Pickering (2007) find that to the degree democracies and mixed regimes use diversionary force, they seek “benevolent” outlets that require low levels of force. Peacekeeping is an obvious outlet for such goals.

Second, deployments directly remove potential troublemakers from the polity. Ghana, for example, saw General Emmanuel Erskine prolong the deployment of peacekeepers in Lebanon precisely because they were likely to complicate the tumultuous political situation in Accra. Hesse (2015, 339) similarly speculated that Sierra Leone’s prospects for democratic consolidation depended on its soldiers being deployed to places like Somalia.

Finally, a particularly important area of benefit is funding. Alternative funding sources became especially important during the 1990s. Aside from the decline of superpower support, African states saw additional challenges to their defense budgets including increased pressure for cuts to military spending stemming from structural adjustment programs designed to manage growing debt (Luckham 1995). The Conference on Stability, Security, and Development Cooperation in Africa (CSSDCA) called for action on a variety of security fronts to help increase regional stability, but also called for substantial reduction in military expenditures (Nathan 1992). Subsequent studies point to the military as the most frequent target of spending cuts in Africa (e.g., Gallagher 1994). It is thus unsurprising that African states are especially likely to use peacekeeping as a shortcut to ensuring civilian control of the military.
This is not mere speculation, as Kathman and Melin (2017) have demonstrated that peacekeeping contributions are significantly higher from countries that spend less on their militaries per soldier. Beyond the benefits provided to the institution, peacekeeping wages are often far higher than what soldiers would earn at home. While mutinies have been argued to at times be sparked by grievances over the handling of wages and perceptions of corruption of higher-ranking soldiers, higher wages could potentially placate soldiers who otherwise may have grievances. Though important relative differences may remain between the enlisted and officers, for example, dramatically higher absolute gains could be important to lower ranking soldiers.

Ghana provides an example of the benefits of peacekeeping that can accrue to sending states. Ghana’s history as a state plagued by poor civil military relations, and as a peacekeeping contributor, allow for consideration of these possibly beneficial aspects. Kwame Nkrumah, devoted to independence and peace on the continent, began Ghana’s stint of peacekeeping endeavors sending troops to then Congo in 1960 (Afrifa 1967). The mission was viewed negatively by the military, largely stemming from losses suffered and the view that national security issues took a backseat to the all-encompassing Congo mission (Afrifa 1967, 69). Nkrumah was removed in a military coup when officers that served in the Congo overthrew his government in 1966. Sources cite the poor handling of the mission and ill treatment of the army as among the reasons for the coup (Erskine 1989; Kotia 2015).

Following Nkrumah’s overthrow, Ghana suffered nine coup attempts and two mutinies between 1967 and 1984. As suddenly as the trend began, 1984 marked the end of Ghana’s coup/mutiny spell. After a break during the early years of post-Nkrumah instability, Ghana continued to contribute to peacekeeping missions, including rotating approximately 6,600 forces to UNEF II between 1974-1979 (Banini et al 2019). Unlike the Congo mission, Ghana’s experience in UNEF II was viewed positively (Erskine 1989). Peacekeeping contributions
accelerated under Jerry Rawlings with troops committed to the ECOWAS mission in Liberia (1990), UNTAC in Cambodia (1992), UNAMIR in Rwanda (1993), and UNAMSIL in Sierra Leone (1998). This acceleration served two main purposes. First, deployments were portrayed as contributing to global peace and serving the national interest (Banini et al 2019). Second, against the backdrop of continued civil military discord and severe economic challenges, deploying soldiers as peacekeepers allowed Ghana’s presidents to keep the army busy and away from domestic political issues. President John Kufuor was able to further ensure the loyalty of the military by dismantling Rawlings’ Cuban- and Libyan-trained commandos, seen as a serious threat to his political survival, and sending members on peacekeeping missions and assigned to various peacekeeping tasks (Africa Confidential 2000). Importantly, these tasks allowed soldiers—often from very poor backgrounds—to receive dramatically increased wages that would allow them to buy homes, invest, and start businesses (Banini et al 2019). These are opportunities they otherwise would have lacked (Erskine 1989; Olonisakin 1997; Clune 2016). Ghana’s peacekeeping experience, however, has not been without controversy. Soldiers have complained of corruption in the selection process, with officers said to demand kickbacks in order to guarantee a soldier’s participation. Though corruption may remain an important challenge in the armed forces, the substantial financial benefits appear to have incentivized soldiers to remain in the barracks.

Organizational Dynamics, Civilian Control, and Mutiny Risk

Prior literature has asserted both positive and negative consequences of peacekeeping for civilian control. We argue that these different views can be reconciled by more carefully considering two dynamics. First, what initially seem to be opposing trends appear more consistent when giving explicit attention to the ramifications for civilian control. For example, the benefits of peacekeeping could feasibly reduce the incentive or ability to attempt a coup,
while at the same time promoting specific peacekeeping related grievances that prompt mutinies. Second, these trends can be better understood by considering other dynamics associated with the contribution. Experiences can vary greatly both within and between missions, and this variation has important implications for how soldiers respond toward their governments.

Civilian control of the armed forces is a broad concept, with its empirical treatment limited to a small portion of activities. Here we focus on the two that are most relevant to a state’s political leadership: coups d’état and mutinies. Though both can represent factions of the armed forces breaking the chain of command, there are crucial differences. Defined as “illegal and overt attempts by the military or other elites within the state apparatus to unseat the sitting executive,” coups carry the explicit distinction of aiming to change the executive (Powell and Thyne 2011, 252). Though only one relatively rare aspect of civil-military relations, quantitative efforts have disproportionately suffered from what Croissant and colleagues (2010) refer to as “coupism.” Here, scholars have tended to explore general theories of civil-military relations with data specific to military coups due to data availability (Feaver 1999).

In contrast, Dwyer’s work on mutinies provides a welcome expansion to other behaviors. Building from Rose (1982, 562-3), Dwyer (2015b, 7) defines mutiny as “an act of collective insubordination, in which troops revolt against lawfully constituted authority for primary goals other than political power.” We follow her definition in this discussion and in our data gathering. Mutinies, while sometimes motivated by grievances similar to those driving coups, are explicitly not an attempt to change political power. This is more than a semantic distinction, as the occurrence of a mutiny assumes that actors involved believe their grievances can be addressed without a change in who holds executive power. This suggests soldiers may
feel aggrieved, but removing the regime is an unattractive prospect. Coups, in contrast, suggest a change in the executive is necessary in order to successfully alter policy.

Given the radically different goals of these activities, it is important to empirically distinguish them. While Lundgren (2018) finds that higher levels of participation in peacekeeping missions significantly reduces the likelihood of coups, we do not necessarily anticipate a similar effect for mutinies. In fact, Lundgren finds a state’s peacekeeping contributions experience significant future declines after coups, indicating that coup-making threatens future payoffs for the armed forces. Such dynamics would seem to incentivize aggrieved soldiers to maintain the political status quo while attempting to have any frustrations remedied via actions short of a coup. Consequently, Lundgren’s descriptions of coup-inhibiting peacekeeping and Dwyer’s (2015a) argument for a mutiny-inducing influence of peacekeeping are not mutually exclusive. In contrast, the pros and cons of participation can specifically influence the types of actions soldiers choose to adopt.

If soldiers mutiny in response to specific grievances, mutiny behavior could vary as a function of the characteristics of the missions. We point to important differences between UN and non-UN missions as one possible reason for this variation. Among African militaries, mutinies have followed missions undertaken by the UN, AU, and ECOWAS, prompting Dwyer (2015a, 2017) to conclude that the problems she describes are general beyond a single organization. Yet important theoretical and empirical evidence exists to suggest this should not be constant. We examined peacekeeping-related mutinies described by Dwyer (2015a), which include 12 mutinies in ten West African countries. Six cases, involving soldiers from Burkina Faso, Gambia, Guinea, and Nigeria, resulted directly from ECOWAS missions. A seventh case, Guinea-Bissau’s 2004 mutiny, came on the heels of participation in the joint ECOMIL/UNMIL mission, the contingent having originally been deployed under ECOWAS. Burundian soldiers deployed to AMISOM mutinied in 2009. Only in Cote d’Ivoire (1999) were the soldiers from
a specifically UN mission. In addition to these cases, our own data collection (described in more detail below) produces four additional mutinies that were directly a result of peacekeeping missions.³

This trend in mutinies after non-UN missions is even more apparent when considering mission size and duration. The average deployment of African soldiers to UN missions increased from 8,400 to 20,700 between 2001 and 2009. On average, 14,000 African soldiers were deployed to UN missions per year, nearly three times the 5,000 per year average deployed by regional organizations over the period (Coleman 2011, 547-48). Despite the vastly larger size and longer duration of UN missions in Africa, and African soldiers providing around half of all UN peacekeepers globally, UN missions are responsible for a minority of peacekeeping-related mutiny cases. A careful examination of these missions suggests this is not a coincidence.

First, UN and non-UN missions differ in resources. There was initial hope that “African solutions” would prove superior in creating peace because indigenous efforts should engender more trust among conflict participants, because African peacekeepers have superior knowledge of the region, and because regional actors have a vested interest in creating and maintaining peace. Yet these advantages have not materialized and seem dwarfed by significant challenges in other areas (Howe 1997), with observers consistently concluding that—relative to the UN—these missions have inferior funding, logistics, and infrastructure. de Coning (2017, 146), for example, remarks that the AU neither possesses “the UN’s full suite of multidimensional capacities, nor the UN’s assessed contribution funding system to enable it to undertake or sustain peace operations.” As Murithi (2008, 79) observes, African organizations “will do the

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³ Our own data gathering effort identified additional peacekeeping-related mutinies in Burundi in 2007 and 2011 (AMISOM), Cameroon in 2015 (MISCA/MINUSCA), and Ivory Coast in 2000 (MINURCA).
basic and dangerous work on the ground” despite lacking the “resources and expertise” of the UN.

These shortcomings are certainly descriptive of ECOWAS’s efforts in the 1990s. Though argued to have “the most advanced mechanisms for addressing regional peace and security in Africa,” ECOWAS suffered from “problems related to command and control, its ad-hoc nature, logistical shortcomings…poor coordination…” being “ill-equipped,” etc. (Obi 2009, 119-25). The African security architecture has undergone substantial changes, particularly since the launch of the AU and its Peace and Security Council, but such problems have persisted. AMIS, for example, saw contributing states threaten to withdraw over a lack of resources, prompting multiple external actors to step in to provide funding, air support, and logistics to salvage the operation (Kreps 2007).

Second, and related, UN missions, in comparison to ECOWAS and AU missions, are funded by member states. While the charters for each organization are similar, in practice AU and ECOWAS missions are funded by outside sources and face serious funding shortfalls (Tardy 2013). This results in lower salaries for soldiers compared to UN missions (Williams 2017). As Dwyer (2017) points out, the issue of pay is central to many cases of mutiny. Mutinies related to pay stem from soldiers not getting paid, late payment, not getting paid as much as others, or missing out on hazard payment for dangerous conditions. On the other hand, the greatly enhanced wages soldiers see on peacekeeping missions could provide an important incentive to remain in the barracks. While such missions can provide further opportunities for corrupt commanding officers to prey on the enlisted—a common complaint—participation in these missions remains an important economic opportunity.

Further, the UN reimburses for personnel (civilian) and 100% of the cost of major equipment, while AU and ECOWAS contributors must supply their own equipment and are
usually not reimbursed (Gaibulloev et al 2015, 728; UN 2015).\(^4\) Costs associated with equipping and deploying soldiers are taken from cuts to the personnel allowance in non-UN missions, further reducing the pay that reaches soldiers. This means that UN contributing countries can often earn a large profit from sending troops. For the AU and ECOWAS, sending troops is considerably more expensive due to their inability to be reimbursed, and the financial benefits to individual soldiers are substantially less (Gaibulloev et al 2015).

Third, beyond the resources of the organizations, the United Nations has higher standards for participation in its missions. The organization undertakes more stringent inspections and often rejects personnel or equipment that are considered unacceptable. This is even true of soldiers being “rehatted” from a pre-existing PKO to a UN mission. For example, the rehatting of ECOMIL troops saw five African countries either have to reduce or fully end their contributions because they did not meet UN standards (Coleman 2011). These substandard conditions, however, would have been present in the soldiers’ earlier participation in a more dangerous environment.

Finally, at the most basic level, there are important differences in mandates. African organizations have from the beginning adopted peace enforcement, which assumes an aggressor has been designated and “the use of force has been authorized to impose the [organization’s] will” (de Coning 2017, 147). Offensive military action is implemented with the specific goal of forcing a military victory or stalemate that forces competing factions to negotiate. In contrast to the UN’s emphasis on neutrality, for example, the Nigerian ambassador to Liberia plainly summarized his country’s commitment as going to “Liberia to help Doe to crush the rebellion” (Coleman 2011, 529). Conversely, not having agreed to the presence of peacekeepers, the NPFL in Liberia immediately began attacking ECOMOG forces after their arrival (Artur 2010). While there were supporters of Taylor’s NPFL (largely Francophone

\(^4\) The UN reimbursement rate as of July 2017 was $1410 per month (UN 2015b, 197).
states including Côte d’Ivoire and Burkina Faso), the group of states directing ECOMOG policy, spearheaded by Nigeria as the largest mission contributor, were directly opposed to military rule in Liberia. This confusion was largely to blame for both the lack of progress and shortages of financial and logistical support for the mission in its early years (Alao 1998, 25; Adebayo 2002, 43-50).

In contrast, the United Nations mandates that “force is only permissible when used in self-defense” (de Coning 2017, 147). The UN sometimes engages in forward military operations, as seen with the Force Intervention Brigade (FIB) in the Eastern DRC (Karlsrud 2015; de Coning 2017). Such exceptions are generally only made when circumstances are especially conducive to success. The FIB, for example, had support from “all the key stakeholders in the region”, its soldiers all originated from members of the Southern African Development Community (SADC) and had long experiences with joint training exercises, and had substantial assets, including “special forces, artillery, attack helicopters, and specially trained troops that were prepared for and anticipated combat” (de Coning 2017, 148-9). Such actions remain the exception. It is far more common, as de Coning (2017, 154) aptly concludes, that the “AU and African sub-regional organizations act as first responders,” while the UN enters “when the situation has been sufficiently stabilized.” The AU Mission in Burundi (AMIB), for example, saw peacekeepers enter an extremely precarious environment, even prompting multiple countries to delay deployments. AMIB managed to stabilize around 95% of the country prior to the launch of the UN Operation in Burundi (ONUB) in June 2004. This practice was effectively endorsed by the 2000 “Brahimi Report” and reaffirmed in the 2015 UN High Level Independent Panel on Peace Operations (UN 2000 “Brahimi Report”; UN 2015). All of these factors have coalesced to create a system in which lesser resourced non-UN PKOs more regularly deploy to conflict theatres in the midst of fighting, often engage in offensive military operations, and are tasked with doing so with resources that are often limited.
to the point the contributor would have been rejected by the UN. Both soldiers and contributing states, meanwhile, receive less financial compensation for participation.

These issues are illustrated in the AU Mission in Somalia (AMISOM) where the UN has shown a continued reluctance to intervene due to the conflict’s pronounced challenges. Former UN Secretary General Ban Ki-Moon infamously noted a UN deployment was “neither realistic nor viable” in late 2007 while the AU was progressing with AMISOM (Williams 2009). Beyond the challenges already facing the AU, and the multitude of complicating factors on the ground, the mission had difficulty reaching half of its original goal of 8000 soldiers. Perhaps most importantly in the eyes of potential mutineers, the reimbursement rate per soldier was set at $550 per month, roughly half that of UN missions (Williams 2009).

On the ground, the organization lacked materiel and logistics. In the early stages of the mission, crucial assistance was required from various entities. Western powers such as the United States, France, and the United Kingdom provided various aspects of support, NATO aided in transport, and the UN relocated hardware from its mission in Ethiopia-Eritrea (Williams 2009). The UN eventually approved an “unprecedented” support package, covering resources, logistics and expertise as varied as supply of fuel and rations, transportation, equipment maintenance, IT support, and help with construction, water, and energy needs (Williams and Boutellis 2014, 273). However, they continued to avoid sending blue helmets to Somalia.

Aside from merely illustrating challenges, these deficiencies (relative to the UN) closely align with grievances that are commonly voiced among mutineers and those noted in prior literature. While agreeing that all major organizations conducting peacekeeping operations in Africa may have experienced mutinies, we argue that non-UN missions should see substantially different levels of grievances and—consequently—mutinies.

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5 The rate was raised to $1028 in April 2009.
**H1:** Participation in UN peacekeeping missions is not associated with a significant increase in mutinies.

**H2:** Participation in non-UN peacekeeping operations is positively associated with mutinies.

**Empirical Analyses**

**Data**

Our empirical analysis uses data on UN and non-UN PKO deployments and mutinies for African countries from 1990-2011. The unit of analysis is the country-year. In the appendix (A3), we also present results using country-months, which are broadly similar. Our dataset contains both African states contributing and not contributing to UN and non-UN peacekeeping missions. The inclusion of non-contributors is important to establish whether peacekeeping increases mutiny risk compared to countries that did not contribute at all.

Our dataset consists of 51 African countries from 1990-2011. The dot plot (figure 1) lists these 51 countries together, with descriptive statistics (sorted on mutiny) on the total number of mutinies and mean UN and non-UN PKO troop contributions. This early bivariate look assessment does not point to an obvious association between the variables. With the exception of Nigeria, the continent’s largest PKO contributions typically have experienced either no (e.g., Ghana) or only one (e.g., Ethiopia) mutiny event in the period under study.

[Figure 1 about here]

**Dependent Variable and Estimation Method**

We collected original data on instances of mutiny in Africa from 1990 to 2011. We follow the lead of Rose (1982, 562-3) and Dwyer (2015b, 7), defining mutiny as “an act of collective insubordination, in which troops revolt against lawfully constituted authority for primary goals other than political power.” Strong effort was taken to avoid conflating this conceptualization

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6 Kathman’s (2013) data end in 2011, and we are therefore unable to explore the effect of large contributions to AMISOM post-2011. However, our data show no cases of AMISOM peacekeeping-related mutinies post-2011.
of mutiny with other actions. This was especially true for attempted military coups. We only included coups as mutinies when the attempt to seize power was preceded by a coordinated mutiny that did not aim to seize political power (e.g., 1999 Cote d’Ivoire). We also avoid conflation with more mundane activities, such as desertion and other forms of disobedience.7

We began our data collection with a regimented search of Lexis-Nexis Academic and Proquest Historical New York Times. Rather than just specific keywords, the coding procedure consisted of searches utilizing broad search terms including soldier, army, military, and others that would result in a larger sample of potential events. This produced several thousand global news articles for each country, which coders reviewed for evidence of an event meeting the definition of a mutiny. Importantly, this was intended to oversample potential cases. This resulted in 567 candidate cases for the time frame investigated. We supplemented this effort with an array of secondary materials, particularly country histories. Most of these initial cases represented instances of coups, coup plots, veteran mutinies, other infighting, rebel attacks, civilian protests, violent crimes, and banditry, among others. We ultimately identified mutinies in 83 country-years in our sample. We independently identified 50 of 51 of Dwyer’s cases that occurred in the time frame of the following analysis (i.e., between 1990 and 2011). Inconsistencies in coding were attributable to different assessments of particularly ambiguous cases, rather than an event being overlooked in our search process. Though we concede that any such data gathering exercise is almost certain to miss some obscure cases, we are confident that our effort closely coincides with prior efforts to both define and document mutiny activity.

Our dependent variable is dichotomous, coded 1 for country-years with mutinies, 0 otherwise. Given our dependent variable is binary, we use logistic regression in all our models.

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7 The Social Conflict Analysis Database (SCAD) (Salehyan et al 2012) includes a similarly defined mutiny variable. However, our review of the cases indicated the implementation of the definition was far broader, including events such as desertion, military infighting, and other acts of violence not fitting our definition.
Mutinies are empirically rare events, occurring only in 83 (7.5%) of observations.\textsuperscript{8}

**Independent Variables**

Our main independent variables measure contributions to UN and non-UN peacekeeping missions.\textsuperscript{9} Ideally, we would be able to account for mission- or conflict-specific grievances however, doing so creates important challenges for analysis. Accounting for these characteristics would imply limiting our analyses to countries with ongoing missions rather than all African states, for two reasons. Investigating whether peacekeepers deployed to more serious conflicts suffer from more grievances makes sense only within the context of an ongoing mission. However, our goal in this article is to assess whether different types of peacekeeping deployments increase mutiny risk compared to each other but also compared to no peacekeeping. Moreover, countries can deploy troops to more than one conflict in the same year, which again would require mission-specific datasets. Further, we would need separate datasets for UN and non-UN missions since they do not deploy to the same countries at the same time. This setup would no longer allow for comparing the effects of UN vs. non-UN peacekeeping. Finally, while the UN provides transparent data on peacekeeping fatalities, non-UN organizations do not. Cognizant of these issues, we rely on the organizational differences in our main analyses, but present results based on mission-specific data in the appendix.

For UN contributions, the variable indicates the yearly number of troops contributed to UN PKO deployments by each of the 51 states in our sample. UNPKO data come from

\textsuperscript{8} While the full data include almost 200 mutinies, we include only those occurring from 1990-2011. Several mutinies were collapsed into single events because they occurred in the same country-year as another mutiny. To address any potential biases introduced by collapsing the data, the appendix (A3) reproduces our results with country-month data. These results are consistent with those presented in the article, with non-UN peacekeeping contributions maintaining a positive and significant effect on mutinies.

\textsuperscript{9} Since absolute troop contributions may not capture the significance of troop deployments as a proportion of the population or the military, we also estimated models (not shown) where we adjust absolute numbers of troops by the number of military personnel and models with the natural log of troops. Neither of these additional specifications changed our main results.
Kathman (2013) and include data on troop, observer, and police contributions for each UN member state from 1990-2011. We include only the variable for troops in our models because the theoretical arguments relate to implications of military rather than police or observer deployments. The number of troops ranges empirically from 0 to almost 5,000 (Nigeria in 2009), and 38 of 51 countries in the sample have deployed one or more UNPKO troops.

Our second independent variable uses yearly data on non-UN contributions from Gaibulloev et al (2015). Our argument distinguishes the effects of UN versus non-UN missions, suggesting that non-UN missions should be more grievance-inducing than UN missions. Many African states contributed to AU and ECOWAS missions, in particular the large peacekeeping missions in Liberia and Sierra Leone in the 1990s. These data are available only at the yearly level and were obtained by Gaibulloev et al (2015) from the Military Balance. The non-UN data do not disaggregate peacekeeping personnel types, instead combining troops, observers, and police. We do not expect this to bias our results since troops are usually by far the largest contribution to peacekeeping. Since the data include information on donor country, recipient, mission name, and year, we researched all missions to confirm that they were indeed peacekeeping missions. For a small number of missions, we could either find no information, or the name of the mission was unknown, or they appeared to be military training programs rather than peacekeeping deployments. We deleted these missions from the data. Non-UN deployments range from 0 to 14000 (Nigeria in 1998). 38 African countries in the sample contributed at least one soldier to non-UN peacekeeping deployments.11

10 We are unable to distinguish among different non-UN contributors because of the small number of observations. Our descriptive discussion suggests that more peacekeeping-related mutinies seem to follow ECOWAS missions.

11 Coincidentally, the number of countries contributing to UN and non-UN peacekeeping is identical (38 countries), but there is only partial overlap among the 13 non-contributing states. Nine African countries did not participate in either UN or non-UN missions in the time period under analysis (Cape Verde, Central African Republic, Comoros, Eritrea, Liberia, Mauritius, Somalia, South Sudan, and Swaziland).
Countries can contribute to both UN and non-UN missions in the same year. Including such countries is problematic for our inferences since we expect different effects of UN and non-UN missions on mutiny risk. We therefore exclude country-years contributing to both types of missions in the models below. Since we do not want to exclude states making token contributions to either UN or non-UN missions, we only exclude country-years with simultaneous contributions of at least 100 personnel to UN and non-UN missions in a given year. Empirically, simultaneous contributions are rare, affecting 4% of all country-years and 9.5% of country-years for countries that made any troop contributions. Excluding these observations means that we omit the following countries and years: Ethiopia (2007-2008), Ghana (1992-1999), Malawi (2007), Morocco (2001-2011), Nigeria (1992-1995, 2003-2007), Rwanda (2006-2007), Senegal (2003-2009), and South Africa (2007-2009).\textsuperscript{12}

It is challenging to establish the most plausible temporal link between peacekeeping deployments and mutinies. Deployments could affect mutinies almost immediately if grievances emerge in mandatory pre-deployment training.\textsuperscript{13} Further, especially for UNPKOs, selection processes are often very competitive and could produce discontent, as Aning and Aubyn (2013, 282) highlight for Ghana. Yet the repercussions of peacekeeping are likely most significant once soldiers return from deployment and have experienced deployment or pay-related grievances. Case illustrations in Dwyer (2015b) also note a substantial time lag between deployment returns and mutinies (e.g. Guinea). In the main models below, we lag both UN and non-UN peacekeeping variables by one year. The UN guidelines for troop contributing countries state that contributing states can rotate military units every six months at the UN’s

\textsuperscript{12} The appendix (A2.3) includes a control variable for simultaneous contributions. Results of the main analysis remain robust with non-UN peacekeepers showing a positive and significant effect on mutiny and UN troops showing no effect. Furthermore, the control variable recording simultaneous contributions fails to reach statistical significance.

\textsuperscript{13} For example, such training lasts approximately one month in Ghana (Aning and Aubyn 2013, 281).
expense, but also mentions 12-month rotations (UN 2008). In table 1 and the appendix, we present both longer- and shorter-term assessments of peacekeeping’s effects on mutiny risk.

**Controls**

We control for several variables that likely influence mutinies and peacekeeping contributions. First, we include a variable that counts the years since the last mutiny event, which accounts for peacekeeping legacies and temporal dependence. Second, we include a variable that measures the extent to which elites engage in coup-proofing (Pilster and Böhmelt 2011). Research has shown that states investing more heavily in coup-proofing, i.e. those with more fractionalized militaries, are less susceptible to coup attempts (Powell 2012). Yet such fractionalization could produce poor intra-military relations and increase the likelihood of mutinies (and also peacekeeping). We use data from Pilster and Böhmelt (2011) to create a variable counting the effective number of rival military organizations.

The next set of controls focuses on variables that create incentives for mutinies but also peacekeeper contributions. First, states with low defense budgets use peacekeeping as a way to boost defense spending. Further, low defense spending could also directly affect mutinies because it increases grievances in the military. We create a variable for military expenditures per soldier by dividing military expenditures by total military personnel. Yearly data for military expenditures (in current US$) come from the Correlates of War (COW) project and the Stockholm International Peace Research Institute (SIPRI).\(^\text{14}\) The COW data end in 2007 but have fewer missing observations than SIPRI, and we therefore add post-2007 data from SIPRI. Data for number of active military personnel come from COW and the World Bank. We again combine data from two sources because COW has more complete coverage before

\(^\text{14}\) We also create a constant US$ measure (in 2005 US$), but because data on the consumer price index are missing for several hundred observations, we use current US$ expenditures as our primary measure.
Second, poor countries can use peacekeeping to earn for the central government. Developing countries now contribute the vast majority of UN troop personnel. We use logged values of per capita GDP with data from the World Bank to measure development. Third, less democratic or unstable states might use peacekeeping to divert attention from domestic problems and reduce the risk of domestic contention. We control for democracy and the stability of political regimes using the polity and durability indicators from Polity IV (Marshall and Jaggers 2002).

We control for logged values of population size with data from the World Bank. In addition, we control for whether states host peacekeeping troops as part of a peacekeeping mission. Such states are obviously unlikely to contribute to peacekeeping, and consistent with findings on the violence-reducing effects of peacekeeping (Hultman et al 2013, 2014), are also expected to experience a lower risk of mutinies. Finally, we include year fixed effects in all models. In all our models, we lag independent variables by one year unless specified otherwise.

**Results**

Table 1 presents results for four models. In model 1, we include a measure that sums UN and non-UN peacekeepers, thus estimating the aggregate effect of peacekeeping. When we do not distinguish between UN and non-UN peacekeeping missions, we find a positive and significant effect of contributions on mutiny risk supporting the broader notion that peacekeeping increases mutiny risk. In model 2, however, we disaggregate the peacekeeper variable to test hypotheses 1 & 2 and distinguish between contributions to UN and non-UN peacekeeping. The coefficient for UN peacekeepers in model 2 is not statistically significant, showing no evidence of greater mutiny risk for countries deploying UN peacekeepers. For non-UN troops, however, we find a positive and significant relationship, showing that effect of the summed measure in model 1 is driven by non-UN contributions. Results in model 2 thus support our first and second hypothesis.
For better interpretation, we plot the substantive effect of the non-UN variable from model 2 in figure 2 below. To focus on empirically relevant observations, we limit the range of non-UN personnel to values between 0 (the minimum) and 2,500 (+2SD above the mean). We see that the probability of mutiny increases from less than 0.04 to more than 0.08 when varying non-UN contributions from 0 to +2SD above the mean.

In model 3, we examine more long-term, cumulative effects of peacekeeping on mutiny risk, summing UN and non-UN contributions over a three-year period. This approach is similar to Savage and Caverley’s (2017) in their analyses of foreign military training and coup risk. In model 3, we again find an insignificant effect of UN contributions, supporting hypothesis 1, while non-UN contributions have a positive and significant effect on mutiny risk, as expected in hypothesis 2. Model 4 includes logged peacekeeper contribution variables to examine whether the inclusion of outlying observations is responsible for the significant effect of non-UN contributions. The mutiny-increasing effect of non-UN peacekeeping could, for example, be driven by large contributions by Nigeria and Uganda to ECOMOG and AMISOM. For logged UN contributions, we find a negative and insignificant coefficient, again showing no relationship. For logged non-UN peacekeeper contributions, the coefficient remains positive and significant at the 90% confidence level ($z=2.02$). The results across the models thus confirm our hypotheses. Contributions to UN missions illustrate no effect on mutinies while Non-UN contributions result in an increase in mutiny likelihood. This finding stands in contrast

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In July 2000, over 100 Nigerian ECOMOG troops, having served in Sierra Leone and Liberia, mutinied, threatening to burn down the hospital, and themselves, in protest at the army’s inability to treat sick and wounded peacekeepers. The troops were ultimately flown to Egypt for treatment and returned to Nigeria where some were convicted of mutiny (Nwosu 2000; Agence France Presse 2001).
to work by Dwyer (2015a, 2017), suggesting that contributions to peacekeeping increase mutiny risk across the board.

For controls, we find that countries with higher GDP per capita have lower mutiny risks. We also identify a positive and significant effect of coup-proofing, suggesting that the establishment of fractionalized militaries has counterproductive consequences for intra-military contention. More time since the last mutiny significantly reduces the risk of subsequent mutinies. The variable for UN peacekeepers hosted is positive and significant in some models, suggesting that countries to which missions are deployed are more likely to experience military instability, but this is likely a result of generally higher instability in such countries. We find no significant effect for military spending per soldier, regime durability, and democracy level, suggesting that the determinants of military mutiny differ from military coups. Since coups are generally conceived of as a measure of civil-military health, these results illustrate the importance of studying alternative indicators of civil-military relations. While measures of military expenditure, regime durability, and democracy are robust determinants of coups, they have little predictive power in explaining the occurrence of mutinies, suggesting the importance of different pathways and actors.

Our theoretical section suggests that decisions to deploy peacekeepers and mutiny risk could be interdependent, meaning that error terms could be correlated. To properly model this interdependent process, we use a conditional-mixed process model – a type of seemingly unrelated regression model - that allow us to concurrently estimate decisions to deploy peacekeepers and mutiny risk (Roodman 2011). This model estimates two equations with two different dependent variables; one with a continuous dependent variable predicting peacekeeper contributions, a second with a dummy dependent variable predicting mutiny risk. In the equation with peacekeeping as the dependent variable, we log peacekeeping contributions to accomplish a more normal distribution. Among regressors predicting
contributions, we use similar controls as in other models, but add a variable counting time since last mutiny to account for leaders who deploy troops abroad who they expect to mutiny (Kathman and Melin 2017). We also add a peacekeeping dummy to account for path dependence in decisions to deploy troops. In the mutiny equation, we use the same variables as in our initial assessment. As table 2 below shows, UN peacekeeping contributions again have no significant effect on mutiny risk, while non-UN contributions significantly increase mutiny risk. The rho term confirms that errors for the two equations are correlated.

[Table 2 about here]

Robustness Tests

The appendix includes descriptive statistics and robustness tests. Section A1 shows descriptive statistics for all variables in yearly models. In section A2, we conduct robustness tests using yearly data, including limiting the independent variable to robust contributions, including all UN contributions instead of only troops, restricting our sample to the countries included in Dwyer (2015a), and country fixed effects. These additional checks confirm the above findings. In section A3, we create a monthly dataset using country-months as unit of analysis, which produces broadly consistent findings. Section A4 includes data at the mission-level for UN and non-UN missions. These data allow for examining whether conflict-or mission-specific characteristics affect mutiny risk. Results do not indicate that longer missions or more severe conflicts increase mutinies in either UN or non-UN missions, however the number of observations is small particularly for non-UN missions. In section A5, we evaluate the main results utilizing a method that corrects for rare events, firth logistic regression. Results remain robust. Next, in section A6, we examine coup attempts as the dependent variable to determine if peacekeeping has a similar effect on coup risk. Results suggest that peacekeeping, either as an aggregate of all peacekeepers or separate measures of UN and Non-UN peacekeepers, has no statistically significant effect on coup likelihood. Section A7 examines controls for
measures of ethnic loyalty from Harkness (2018) in the armed forces to determine if ethnic favoritism may prompt grievances increasing mutiny risk. Next, A8 examines an alternative measure of coup-proofing, utilizing data from De Bruin (2018) on counterweights. Finally, A9 examines the results of the main analysis in Table 1 with the inclusion of a dummy variable for West Africa. Our results remain robust.

Conclusion

The expansion of UN peacekeeping operations was accompanied by an increase in troop deployments and the number of countries contributing to these deployments. Countries providing the largest number of soldiers to peacekeeping today are poorer, less democratic, and less stable than those in earlier decades. While the recent literature has shown largely positive effects in host countries, we know comparatively little about the implications on sending states. Recent research argues that peacekeeping produces or exaggerates grievances in contributing states, leading to an increased risk of mutinies in sending states (Dwyer 2015a, 2017). Our results suggest that pessimistic claims about aggregate effects of peacekeeping are exaggerated. We find that UN PKO troop deployments have no effect on mutiny in African sending states and this non-finding remains robust across a large number of model specifications. In contrast, we establish a mutiny-exacerbating effect for non-UN missions.

Grievances, related to pay or deployment, are likely more serious in AU and ECOWAS missions because compensation is much lower or even non-existent. For example, Nigeria received no compensation for its participation in ECOWAS missions in Liberia and Sierra Leone in the 1990s (Adeniyi 2015), with commentators suggesting that its contribution was instead motivated by its ambition for a permanent seat on the UN Security Council or regional power aspirations (Bellamy and Williams 2013, 6).

Our findings suggest that peacekeeping alone does not prompt an increase in mutinies which can be seen as good news for UN peacekeeping. Instead, it appears that non-UN missions
drive the mutiny increasing effect of peacekeeping deployments. Indeed, African countries contributing to UN peacekeeping missions are no more at risk of mutinies than those not contributing to such missions. While UN peacekeeping experiences no shortage of challenges in host states, including sexual abuse by peacekeepers, and difficulties in considering local context, among others (Autesserre 2009, 2010; Beber et al 2017), we find no evidence of unintended and destabilizing consequences for sending states. Our results are in line with those pointing to more benign implications of UN peacekeeping provisions. Bellamy and Williams (2013, 9), for example, highlight substantial financial benefits of peacekeeping for developing countries. Some contributing states share significant benefits with peacekeepers in the form of additional allowances, whereas others channel them exclusively into national accounts. Both of these could have positive effects on the professionalization of militaries and/or defense spending, although we caution that some developing countries have also emphasized peacekeeping as an additional burden (Bellamy and Williams 2013, 9). In light of our findings, future efforts to assess the consequences of peacekeeping participation could consequently do more to focus on the specific policies of contributing governments, mission mandates, and mission characteristics. Rather than examining peacekeeping contributions as a monolith, our findings illustrate the importance of considering contributions in light of the varied circumstances in which they take place.
References


Janes Defence Weekly. 2018. “Flourishing Forces: Chile Maintains a Competent Combat Capability. Available at:
https://www.janes.com/images/assets/544/78544/Flourishing_forces_Chile_maintains_a_competent_combat_capability.pdf


Karlsrud, John. 2015. “The UN at War: Examining the Consequences of Peace-Enforcement Mandates for the UN Peacekeeping Operations in the CAR, the DRC, and Mali.” *Third World Quarterly* 36, no. 1: 40-54.


Kathman, Jacob and Reed Wood. 2015. “Stopping the Killing During the Peace: Peacekeeping and the Severity of Post conflict Civilian Victimization.” *Foreign Policy Analysis* 12, no. 2: 149-69.


International Interactions 38, no. 4: 503-11.


SIPRI Military Expenditure Database. 2015. Available at: https://www.sipri.org/databases/milex


Table 1: Country-year logit regression of mutiny, 1990-2011

<table>
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<tr>
<th></th>
<th>(1) All PK</th>
<th>(2) UN and non-UN</th>
<th>(3) 3-year total</th>
<th>(4) Logged PK</th>
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<td>-0.04010</td>
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Standard errors clustered on country in parentheses.
+ p<.1 *<.05 **<.01
Table 2: Country-year CMP regression of mutiny, 1990-2011

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<th>Variable</th>
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Standard errors clustered on country in parentheses.
+ p<.1 *<.05 **<.01