Foreign Military Assistance and the Quality of the Peace in Post-Conflict Countries

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What are the effects of foreign military assistance on the quality of the peace in post-conflict countries? Security assistance could help a post-conflict government establish a monopoly on the legitimate use of force within the state, leading to a more durable peace and greater human security. On the other hand, foreign military aid might decrease incentives for good governance, weaken civilian control over the armed forces, and provide regimes with more effective tools of repression. Despite the stakes and the tremendous amount of foreign military aid flowing to governments of post-conflict countries, the academic literature provides little guidance as to what policymakers and practitioners should expect the effects of this aid to be. How does the provision of weapons, financing, training, advising, and other forms of military assistance affect the quality of the peace in countries struggling to recover from internal armed conflict?

Military aid is curiously absent as a phenomenon of interest to security scholars given the magnitude and geographic reach of this foreign policy tool. As we will discuss later in this paper, the absence of systematic studies of the causes and consequences of military aid flows is at least partially due to the lack of data. However, the scope of U.S. military assistance alone gives some indication of the potential impact of this instrument of statecraft. The United States spends more than ten billion dollars per year on direct military assistance to foreign governments and sub-state groups (USAID 2006). The majority of this aid goes to approximately 60 countries around the world to allow them to buy American weapons. In FY2016, the United States allocated $17.4 billion dollars for security assistance to foreign governments and nonstate opposition groups.1

The human security impacts of cross-border flows of weapons, military equipment, combat advisors, military financing, and other forms of lethal assistance are a significant concern for nongovernmental and intergovernmental organizations on the ground in volatile regions. But few scholars have investigated the effects of military aid provided to regimes governing countries after conflict termination and almost all of the existing studies are case studies of one country. While direct military intervention receives significant scholarly attention (c.f., Balch-Lindsay, Enterline, and Joyce 2008; Gent 2008; Grigoryan 2010; Murdie and Davis 2010; Peksen 2012; Pickering and Kisangani 2009), more indirect aid provided to state and nonstate actors is understudied. Studies that look at aid provided to post-conflict countries tend to focus on economic assistance. Over the last decade, the impacts of development aid have been extensively investigated. In contrast, only three original research articles on the impacts of foreign military aid were published in the top fourteen political science and international relations journals during this time period (Bapat 2011; Dube and Naidu 2015; Sullivan, Tessman, and Li 2011). In a 2014 report, researchers at RAND note that they were unable to “find any cross-sectional time-series studies that examined the effect of military or security aid on a country’s stability and political development” (McNerney et al. 2014, 21).

There are competing narratives on the best ways to promote human security in post-conflict countries. Common sense would seem to dictate that funneling weapons into conflict-affected regions and, in particular, countries recovering from the devastating effects of civil war, would be ill-advised. Indeed,

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this is the predominant narrative of nongovernmental organizations promoting human rights and disarmament. According to these practitioners, providing weapons, ammunition, and military equipment to fragile, conflict-affected states encourages repression, discourages good governance, and fuels violence.

Some scholarship supports this view. But an alternative perspective maintains that state capacity, and, in particular, a monopoly on the use of violence within the state, is a necessary condition for development and enduring peace. Low state capacity encourages the formation of nonstate armed groups to fill the security vacuum and leaves space for violent criminal networks and other extralegal groups. If the state cannot control these groups, they pose a significant threat to human security and raise the risk of conflict recurrence (Toft 2010; Walter 2002). This concern about low state capacity has been a strong theme in US Department of Defense policy since at least 2005. The official stance is that security assistance can help prevent instability and reduce state fragility. Reflecting this doctrine, the DoD has placed an ever-increasing emphasis on security cooperation with foreign militaries, has expanded elements of each branch of the armed forces dedicated to foreign security cooperation, and created additional funding sources for security cooperation (McNerney et al. 2014).

In an effort to begin filling critical gaps in our understanding of the impacts of arming post-conflict governments, this project explores how bilateral military aid and arms transfers to these governments impacts the durability of peace and state repression in the decade after conflict termination. This study builds on a small but growing body of research on the quality of the peace in countries that have recently terminated an internal armed conflict countries (Ghobarah, Huth, and Russett 2003; Hoddie and Smith 2009; Huang 2016; Iqbal 2010; Jarstad 2009; Kang and Meernik 2005; Lai and Thyne 2007; Meernik, Nichols, and King 2010). In particular, in this paper we are interested in how human rights conditions and the risk of conflict recurrence are affected by the supply of weapons from more powerful states. Arms transfers and other forms of military assistance provided to belligerents during armed conflict have been found to increase both the intensity and the duration of war (Aydin and Regan 2012; Regan 2002; Testerman 2015). Here, we focus on the risk that arming and equipping the military in fragile, post-conflict environments could encourage the state to rely on repression rather than providing public goods and make state repression more deadly.

**Literature on the impacts of foreign aid on human security**

There is no body of literature that develops theory specific to the relationship between military aid and the quality of the peace in post-conflict countries. Moreover, empirical research to date has focused almost exclusively on the impact of military assistance provided to combatants during an active armed conflict, or the effects of development and humanitarian aid to post-conflict states. For this study, we draw on academic research into the effects of foreign aid more generally.

Recent research on the effects of foreign aid does not paint an optimistic picture of the potential for aid to improve human security in post-conflict countries. One strand of this literature develops a theory of foreign aid impact based on moral hazard logic. According to this logic, governments that are dependent
on taxing the population to generate revenue have incentives to provide the public goods that will allow the population to be productive, but leaders who can rely on foreign aid or natural resource rents for revenue, lack these incentives (Bueno de Mesquita and Smith 2009; Kono and Montinola 2013; Lai and Morey 2006; Svensson 2000). Moreover, facing the choice between protecting civil liberties to build legitimacy or repressing dissent, leaders who can depend on foreign aid revenue find fewer reasons to invest in building legitimacy. This is particularly problematic in countries with weak mechanisms of accountability (Easterly 2006; Moyo 2009). Several studies have found evidence the government recipients of significant amounts of foreign aid provide lower levels of public goods and are more corrupt and more repressive (Bell et al. 2013; Bueno de Mesquita and Smith 2010; Cingranelli, Fajardo-Heyward, and Filippov 2014; DeMeritt and Young 2013; Knack 2001).

A separate strand of literature focusing specifically on the relationship between foreign aid and conflict. Many of these studies suggest that, at least under some conditions, foreign aid can fuel violence by providing a source of material support to armed groups and introducing a valuable good that groups in conflict have incentives to fight over. Savun and Tirone (2009) find that foreign aid can serve a protective function, reducing the likelihood that an exogenous economic shock causes conflict. De Ree and Nillesen (2009) see evidence that aid can reduce the duration of civil conflict. In contrast, Narang (2015) argues that “Since humanitarian aid is a valuable economic resource, both the state and other armed groups in a civil war will seek to control or regulate it in an effort to influence and control the civilian population.” Several recent studies have concluded that, under a fairly broad range of conditions, violence is worsened by the provision of humanitarian aid to conflict-affected regions (Berman, Shapiro, and Felter 2011; Böhnke and Zürcher 2013; Fishstein and Wilder 2012). Nunn and Qian (2012) show that increases in US food aid increase both the incidence and the duration of armed conflicts in recipient countries with a recent history of civil conflict. Wood and Sullivan (2015) maintain that humanitarian aid can create incentives for armed groups to intentionally target civilians because it provides looting opportunities and challenges rebel authority. In their study they find evidence that humanitarian aid is positively associated with rebel, but not government, violence against civilians.

If even development and humanitarian aid can encourage state repression and exacerbate violent conflict, sending weapons, ammunition, and military equipment to fragile post-conflict countries could be a recipe for disaster. A 2014 RAND report based on a comprehensive analysis of the impact of U.S. security assistance on recipient states’ score on the State Fragility Index concludes that US security assistance is associated with a small, but statistically significant, reduction in state fragility. The effect is primarily observed in countries receiving relatively low levels of security assistance; increased levels of assistance exhibit diminishing returns. Moreover, the reduction of state fragility is primarily seen in states with democratic regimes, stronger institutions, and greater state reach. Security aid had no effect in states with high scores on the State Fragility Index. More significantly, only aid directed to military and police education, counternarcotics, and law enforcement was associated with greater stability. Material aid, the largest category of U.S. security assistance, had no effect on state fragility.

In previous research on arms transfers more generally, arms transfers to developing countries appear to increase human rights abuses and impede democratization (Blanton 1999a, 1999b). Earlier research links Cold War-era U.S. military aid to increases in the strength of military regimes and in the probability
of military coups (Rowe 1974). Maniruzzaman (1992) finds that higher per capita arms transfers are positively correlated with both the probability of a coup d’état and the length of military rule. There is also evidence that arms transfers from major powers encourage client states to adopt more aggressive foreign policies toward their neighbors (Kinsella 1994, 1998; Kinsella and Tillema 1995) (Craft and Smaldone 2002).

Theory and Hypotheses

We develop two related arguments concerning the impact of lethal aid on post-conflict societies. One concerns the likelihood of conflict recurring, while the second concerns the level of repression that societies will suffer at the hands of the regime. We argue that lethal aid should lower the likelihood of conflict recurrence, while at the same time leading to higher levels of repression and human rights violations.

Conflict recurrence

Military assistance provided to the government of a country emerging from the turmoil of civil war could enable the state to establish a monopoly on the use of force, leading to more durable peace and greater human security. A number of scholars have argued that low state capacity, which Hendrix (2010) defines as a combination of military capacity, administrative capacity, and the coherence of state institutions, is a primary cause of internal armed conflict. Cramer and Goodhand (2002) maintain that a centralized, credible, and effective state—a key component of which is the state’s monopoly on force—is essential for the maintenance of peace and economic development. In empirical studies, low state capacity is often associated with greater risk of civil war onset and greater armed conflict duration (Sobek 2010).

Both Walter (2015) and Toft (2010) maintain that economic and social development, and durable peace after civil war, are only possible after the state establishes security. Essential to every successful peace deal is the ability of the state to credibly commit to provide for the safety of demobilizing combatants and the communities those combatants protected during the war. Combatants will not disarm if they fear for their security. An additional high priority task for governments after armed conflicts is to prevent demobilized former combatants from taking advantage of a power vacuum to gain control of conflict zones. Although many citizens would like to see a peace dividend from the termination of a civil war, the years after a peace deal are signed often require the government to increase spending on the military in order to ensure disarmament, demobilization, and reintegration (DDR) of former combatants is successful, security is provided to all communities, and appropriate training can take place for armed forces transitioning to a new environment.

A less benign argument can be made that even regimes with no interest in providing the public good of security to their population still have incentives to prioritize efforts to prevent the reoccurrence of conflict. Efforts to consolidate control require peace and the establishment of the monopoly on violence, regardless of how a regime intends to use that monopoly in the post-conflict era.

Therefore, whether leaders are benevolent or malevolent in their intentions, rulers should direct lethal aid to consolidate the peace and prevent conflict recurrence.
Hypothesis 1: Higher levels of military aid after conflict termination will be associated with a lower risk of conflict recurrence.

Levels of repression
We now turn to the argument that the transfer of arms will lead to an increase in the violation of human rights in post-conflict societies. Collier et al. (2008) provide compelling evidence that post-conflict societies significantly struggle with the twin problems of economic recovery and the threat of recurring conflict. Further, the underlying reasons for internal armed conflicts are often not decided, even if some agreement has been reached by the actors. Internal non-state challengers often stop fighting before they are eradicated, thereby surviving to continue disruption of the state’s functioning in some other form or at some other time of their choosing. In fact, McCormick et al. find in a survey of internal conflicts from 1945 to 2006 that only 10% of all internal conflicts “resulted in a stable internal peace” (2008: 129). Given this, leaders in such regimes are under particular pressure to choose post-conflict strategies very carefully.

Because postconflict societies are fragile and resource-constrained by nature, elites must make particularly difficult choices in the allocation of scarce resources. More specifically, elites must choose what proportion of the government’s resources toward providing concessions to the citizenry in the form of public goods and what proportion toward providing key supporters with private goods, repressing dissent, and forcefully imposing order.

We start from the assumption that regime leaders seek, above all, to retain their position of authority. To do so, regime leaders have to provide their essential supporters with a package of public and private goods that are satisfactory enough to prevent an attempt to replace the leadership. One strategy is to provide “the public goods associated with generating greater aggregate economic activity, at the cost of having less control…” (Blanken 2012, 35). An alternative strategy is to “strictly control the allocation of valued commodities, at the cost of less aggregate economic activity” (Blanken 2012: 35, see also North, Wallis, and Weingast 2009; Olson 1993). The decision about how to allocate resources between private and public goods is especially crucial for the regimes under consideration here, given that post-conflict societies are fragile and resource-constrained.

The distribution of resources as private goods to key supporters allows for greater control and decreases the risk that supporters of the incumbent leader will defect to the opposition (Bueno de Mesquita et al. 2003). While public goods facilitate economic growth, and thereby the ability of the government to generate revenue from taxing the population (Bueno de Mesquita and Root 2000), providing public goods like the rule of law, freedom of the press, and public education requires regimes to divert scarce resources from buying off key constituents and makes it easier for dissenters to organize and challenge the government (Bueno de Mesquita and Smith 2010). The citizenry may demand concessions in the face of this arrangement, but such demands will only work when they can impose significant costs on

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2 This is a common assumption in the literature in economics and political science (c.f., Acemoglu and Robinson 2005; Bueno de Mesquita et al. 2003)
the regime – through strikes, demonstrations, riots, et cetera. In response to public grievances, governments that do not want to make concessions to the public, can respond with repressive tactics (Poe and Tate 1994; Davenport 1995; Gartner and Regan 1996). While the provision of public goods makes challenging leaders less costly, repression makes it more difficult for opposition movements to organize, publicize their grievances, and build support (Bueno de Mesquita and Smith 2010). Human rights abuses like torture, disappearances, and extrajudicial killings can be used by regimes to deter citizens from challenging their authority and to intimidate, silence, or eliminate rivals (Davenport 2000, 2007; Moore 2000).

On the other hand, maintaining an effective repressive apparatus is expensive; leaders must direct resources to state security forces and/or paramilitary groups, making these resources unavailable for private consumption. At the same time, security forces dedicated to repressing domestic dissent may be less effective at providing defense against external threats. Finally, as noted above, diverting the resources of the state to private goods provision rather than supplying public goods depresses economic growth and the ability of leaders to generate revenue from taxing the economic activity of the population. As Acemoglu and Robinson (2005) argue, repression “is often sufficiently costly that it is not an attractive option for elites” (xii).

We argue that significant flows of lethal aid from foreign governments can tip a regime’s calculus towards a strategy that relies on private goods provision and the repression of dissent. A reliable flow of foreign weapons lowers the cost of repression and increases the probability that it will be effective at preventing a challenge that could topple the regime. At the same time, foreign military aid itself constitutes a private good that can be used to reinforce the support of a small military elite in the face of challenges from the wider citizenry (Bueno de Mesquita et al 2003). Finally, the ability to fund state security forces with external resources makes the government less dependent on taxing the population to generate revenue. All of this serves to make the regime less sensitive to the risks of focusing on private goods provision, and lowers the costs of repressing dissent. If arms transfers make the tools of repression cheap relative to the costs of providing public goods, we should see increased violations of human rights when governments provide lethal aid to post-conflict countries.

Hypothesis 2: Higher levels of military aid after conflict termination will be associated with greater state repression.

Research Design

We use an original dataset, Strategies and Tactics in Armed Conflict (STAC), to identify all cases of violent conflict between an incumbent government and an armed opposition movement within a state between 1945-2010 (Bloom et al. 2013; Sullivan and Karreth 2013). The dataset codes 171 internal

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3 Research for this original data collection and coding effort was funded by a grant from the Office of Naval Research, US Department of the Navy, No. N00014-09-1-0557. All coding decisions and results are those of the authors and do not necessarily reflect the views of the Office of Naval Research. The dataset identifies internal armed conflicts in which government and opponents engaged in the use of force that resulted in at least 25 deaths within one year. Domestic
armed conflict terminations during this time period. Our unit of analysis is the post-conflict country-year. We include an annual observation for each country that experienced an internal armed conflict for ten years following conflict termination. Our dataset is therefore structured as a panel, allowing us to make comparisons both across time within countries and across countries. Because some countries experience multiple conflicts, and we therefore observe multiple post-conflict periods for the same country, we report robust clustered standard errors for all analyses.

**Dependent Variables**

*Conflict Recurrence.* To test hypotheses one we create a dichotomous variable that indicates whether or not an armed conflict resumed in a particular post-conflict year. This variable is coded from the STAC dataset and cross-verified with data from the UCDP Conflict Termination dataset (Kreutz 2010).

*State Repression.* As a measure of state repression in post-conflict countries, we use the latent variable estimates of repression generated by Fariss (2014). Most cross-national studies of major human rights violations employ either Cingranelli and Richards’ (CIRI) physical integrity rights index or the Political Terror Scale (PTS) (Cingranelli and Richards 1999, 2010; Wood and Gibney 2010). Fariss’ Human Rights Protections (HRP) measure, which is available for 204 countries between 1949 and 2010, incorporates data from CIRI and the PTS as well as additional indicators of torture, government one-sided killings, genocide/politicide, and political executions. In addition, it uses a Bayesian measurement model to correct for the increasingly strict standards of accountability of human rights monitoring agencies over time. Fariss provides strong evidence that the human rights country reports produced by the U.S. State Department and Amnesty International—which are the basis for the measures created by CIRI and the PTS—are biased by changes in the standard of accountability over time due to these agencies’ efforts to gather more accurate information, broaden the scope of their information-gathering, and pressure governments that are improving human rights to continue reforms. In the full dataset, Fariss’ Human Rights Protections measure varies from -3.13 to +4.69 with a mean of .25 and a standard deviation of 1.36. Higher values indicate better human rights practices. For the observations in our dataset—annual observations of countries for ten years following the termination of an armed conflict—HRP varies from -2.89 to +2.6 with a mean of -.57. In the first year post-conflict, the mean is -.81.

**Key Independent Variables**

While detailed data on development and humanitarian aid are abundant, military aid data are sparse. The United States and the UK provide detailed data on the amounts and types of overt security assistance they provide to foreign governments. Beyond these two countries, however, the largest providers of military aid do not make the military aid they provide to foreign countries public in any systematic way. As a result, most studies focus exclusively on U.S. or British military aid, or investigate the effects of arms transfers rather than aid. Neither of these strategies is ideal for addressing our research question. Since we are interested in how the magnitude and types of military aid provided to a government affect conditions in the country, measures which exclude assistance provided by Russia, China, France, and other powerful states are likely to be misleading. Arms transfers to a country also

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unrest that resulted in demonstrations and protests, but did not lead to the use of organized force by either the government or its opponents is not coded as an armed conflict in this study.
provide a distorted picture of aid flows. The military weapons and equipment a country imports include purchases made without any foreign financing and there is no clear way to determine what proportion of these transfers are purely commercial transactions rather than aid. At the same time, a measure of arms transfers does not capture other common forms of foreign military assistance like training, advising, and troop deployments.

As a first cut, we use two proxy measures of foreign military assistance: a state’s arms imports as a proportion of its total exports in each post-conflict year and the state’s arms imports as a percentage of its GDP. We make the assumption that the proportion of arms transfers provided as aid, or purchased with aid, as opposed to being purchased with the government’s own revenue, increases as the value of the weapons imported increases relative to the country’s ability to pay—proxyed here by the total value of the country’s exports and the country’s gross domestic product.

Since all of our measures of foreign military assistance are highly skewed and we expect an increase at low levels of aid to have a greater impact than the same increase at high levels of aid, we use a modified log data transformation approach common in studies of wealth data to reduce the dispersion of the variables without losing observations with zero reported imports—the inverse hyperbolic sine transformation (c.f. Carroll, Dynan, and Krane 2003).

$$\log [y_i + (y_i^2 + 1)^{1/2}]$$

**Control Variables**

The goal of the empirical analysis is to test hypotheses positing a causal relationship between foreign military aid and post-conflict conditions. As foreign military support is not randomly assigned to post-conflict countries, it is likely that the countries to which external support is provided are systematically different from the countries to which no support is provided. If these differences are also determinants of conditions in post-conflict countries it will be difficult to determine whether any observed differences between post-conflict countries are due to military aid or pre-existing conditions. We therefore include several additional variables in order to control for possible confounding effects.

Our equation predicting conflict recurrence controls for official development assistance (ODA), the number of years that have elapsed since conflict termination, conflict termination by government military victory, the duration of the conflict, the presence of a multinational peacekeeping force, external support provided to the opposition during the conflict, and ethnic conflict. Some models also control for the country’s GDP per capita and the value of the country’s exports. The fully specified model predicting state repression controls for a country’s pre-conflict human rights record, the amount of official development assistance provided to the country, the intensity of the recently terminated armed conflict, the duration of the conflict, whether the opposition was mobilized on the basis of ethnic identity, the number of years that have elapsed since conflict termination, the country’s GDP per capita, and post-Cold War observations. Post-conflict human rights conditions in a country are highly correlated with conditions prior to conflict onset (Pearson’s $r = 0.6$). We control for the prewar human rights
environment with a variable measuring the average of the country’s Human Rights Protections scores in the ten years prior to conflict onset. This helps isolate the effect of other variables on human rights protection in the post-conflict period.

An additional control variable indicates the presence of multinational peacekeeping forces in the post-conflict period. Multinational peacekeeping may be more likely following wars that are internationalized by the intervention of additional states during the conflict. Controlling for a growing consensus that the UN is more likely to intervene when the human rights situation in a country is particularly dire (Gilligan and Stedman 2003; Fortna 2004, 2008a; Melander 2009), there is some evidence that large numbers of armed PKO troops reduce violence against civilians (Kathman and Wood 2014). However, Meernik, Poe, and Shaikh (2006) find U.S. military interventions have no effect on human rights between 1977-1996, while Peksen (2012) concludes that both pro-government and neutral military interventions have a negative effect on the level of respect for physical integrity rights. Murdie and Davis (2010) find that peacekeeping interventions can improve human rights conditions, but only if they have a humanitarian purpose and attempt to mediate between the government and opposition.

**Statistical Method**

For the models estimating the effects of military aid on conflict recurrence, the dependent variable is dichotomous and we employ logistic regression models with random effects by armed conflict. Because some countries (e.g., Bolivia) experience multiple conflicts, and we observe multiple post-conflict periods for the same country, we use clustered standard errors weighted by countries for significance tests.

We use a latent, continuous measure for states’ human rights protections as our outcome variable and the distribution of this variable is close to normal. Therefore, we test our hypotheses using a linear model. All models are estimated with the GLS random-effects estimator with varying intercepts by armed conflict. Alternatively, the results are robust to models with varying intercepts for countries as well conflicts. We again estimate robust standard errors clustered by country.

**Results**

Table 1 summarizes the hypotheses tested in the analyses below.

**Table 1. Summary of Hypotheses**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Description</th>
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<tbody>
<tr>
<td>Hypothesis 1</td>
<td>Higher levels of military aid after conflict termination will be associated with a lower risk of conflict recurrence.</td>
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<tr>
<td>Hypothesis 2</td>
<td>Higher levels of military aid after conflict termination will be associated with greater state repression.</td>
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Table 2 reports results from the estimation of three logistic regression models predicting the recurrence
of armed conflict in countries that have recently experienced an internal armed conflict. For comparison, Model 1 is a baseline model that excludes a measure of foreign military aid. Model 2 uses arms imports as a proportion of the country’s exports as a proxy for the magnitude of foreign military assistance. As noted above, we use a modified log transformation for this measure and all other measures of military aid. Model 3 uses arms imports as a percentage of the country’s gross domestic product as a measure for foreign military aid. The measures are lagged by one year to ensure that the provision of aid precedes the measure of human rights conditions. All of the equations include controls for official development assistance (ODA), the number of years that have elapsed since conflict termination, conflict termination by government military victory, the duration of the conflict, the presence of a multinational peacekeeping force, external support provided to the opposition during the conflict, and ethnic conflict. Models 1 and 3 also control for the country’s GDP per capita while Model 2 includes the value of the country’s exports. Robust standard errors, clustered at the country level, are shown in parentheses under each coefficient estimate. Statistically significant coefficients are indicated by asterisks.
<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arms Imports as Percentage of Exports (\text{prior year})</td>
<td>-0.87</td>
<td>1.37</td>
<td></td>
</tr>
<tr>
<td>Arms Imports as Percentage of GDP (\text{prior year})</td>
<td></td>
<td>-0.47</td>
<td>0.35</td>
</tr>
<tr>
<td>Value of Exports (logged)</td>
<td>-0.04</td>
<td>0.14</td>
<td></td>
</tr>
<tr>
<td>Official Development Assistance (logged)</td>
<td>0.32</td>
<td>0.55**</td>
<td>0.35</td>
</tr>
<tr>
<td>GDP per capita (logged)</td>
<td>0.20</td>
<td>0.25</td>
<td>0.25</td>
</tr>
<tr>
<td>Years post-conflict</td>
<td>-0.14***</td>
<td>-0.12*</td>
<td>-0.13**</td>
</tr>
<tr>
<td>Government military victory</td>
<td>-1.15*</td>
<td>-1.60**</td>
<td>-1.54**</td>
</tr>
<tr>
<td>External support to rebels</td>
<td>1.65***</td>
<td>1.90***</td>
<td>2.11***</td>
</tr>
<tr>
<td>Conflict duration (logged)</td>
<td>0.64</td>
<td>0.72</td>
<td>0.63</td>
</tr>
<tr>
<td>Multinational peacekeeping force present</td>
<td>n.s.</td>
<td>n.s.</td>
<td>n.s.</td>
</tr>
<tr>
<td>Ethnic conflict</td>
<td>1.47</td>
<td>1.31*</td>
<td>1.48</td>
</tr>
<tr>
<td></td>
<td>0.66</td>
<td>0.75</td>
<td>0.66</td>
</tr>
<tr>
<td>(N) (post-conflict years)</td>
<td>659</td>
<td>451</td>
<td>481</td>
</tr>
<tr>
<td>Pseudo-R(^2)</td>
<td>0.18</td>
<td>0.26</td>
<td>0.24</td>
</tr>
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</table>

Note: Robust standard errors in parentheses, clustered by country.
Hypothesis 1 predicts that military aid will decrease the risk of conflict recurrence. We find no evidence to support this hypothesis. Neither arms imports as a percentage of exports nor arms imports as a percentage of GDP are correlated with the resumption of an armed conflict in the following year. The relationship between conflict recurrence and official development assistance is positive and significant in model 2, but this may be because development assistance flows to the most unstable countries. The variable is not statistically significant in models that control for GDP per capita.

As we might expect, the peace becomes more stable as time passes and the risk of conflict recurrence declines with each year that elapses after conflict termination. In line with previous studies, conflicts ended by military victory by the government are less likely to recur. Neither the presence of a multinational peacekeeping force, nor the duration of the armed conflict, are predictive of conflict relapse. Ethnic conflict has a positive, marginally significant effect on conflict recurrence in Model 2. The effect of third party support provided to the armed opposition to the conflict is intuitive, but the magnitude is somewhat surprising. The probability an armed conflict will be restarted in the average post-conflict year increases from just 2% when the rebels did not receive any external support, to 12% when the rebels received assistance from a third party during the conflict.

We test hypothesis 2 with multivariate models estimating the extent to which a state protects or violates the human rights of its citizens in each year for ten years after conflict termination. Table 3 reports results from the estimation of three random effects GLS models of Human Rights Protection (HRP) levels in countries that have recently experienced an internal armed conflict. Model 3.1 uses arms imports as a proportion of the country’s exports in the prior year as a proxy for the magnitude of foreign military assistance. Model 3.1 also controls for human rights conditions in the decade prior to the armed conflict, the absolute value of a country’s exports, GDP per capita, the number of years that have elapsed since conflict termination, the duration and intensity of the conflict, the presence of a multinational peacekeeping force, ethnic conflict, and the recurrence of active armed conflict. Model 3.2 uses arms imports as a percentage of the country’s gross domestic product as a measure for foreign military aid. The final model introduces an interaction between arms imports as a percentage of GDP and a dummy variable indicating that the chief executive is constrained.

All of the measures of military assistance have a negative and statistically significant (p<.05) effect on post-conflict human rights protections. Model 3.3 indicates that although human rights protections are higher in post-conflict countries with more constrained chief executives, the effects of arms transfers do not vary with executive constraints.
Table 3: GLS Random Effects estimates of Human Rights Protection levels

<table>
<thead>
<tr>
<th></th>
<th>Model 3.1</th>
<th>Model 3.2</th>
<th>Model 3.3</th>
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<tbody>
<tr>
<td>Arms Imports as Proportion of Exports (<em>prior year</em>)</td>
<td>-0.28**</td>
<td>0.13</td>
<td></td>
</tr>
<tr>
<td>Value of Exports (logged)</td>
<td>-0.07</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>Arms Imports as Percentage of GDP (<em>prior year</em>)</td>
<td>-0.15***</td>
<td>-0.14***</td>
<td>0.06</td>
</tr>
<tr>
<td>Arms Imports Percentage of GDP x Constrained</td>
<td>-0.01</td>
<td>0.20</td>
<td></td>
</tr>
<tr>
<td>Constrained Executive</td>
<td></td>
<td>0.62**</td>
<td>0.29</td>
</tr>
<tr>
<td>Military Spending as Percentage of GDP (<em>prior year</em>)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDP per capita (logged)</td>
<td>0.19</td>
<td>0.10</td>
<td>0.03</td>
</tr>
<tr>
<td>Years post-conflict</td>
<td>0.03*</td>
<td>0.02</td>
<td>0.02</td>
</tr>
<tr>
<td>Average HRP in pre-conflict decade</td>
<td>0.61***</td>
<td>0.65***</td>
<td>0.58***</td>
</tr>
<tr>
<td>Conflict duration (logged)</td>
<td>0.00</td>
<td>-0.01</td>
<td>-0.03</td>
</tr>
<tr>
<td>High government casualties</td>
<td>0.25</td>
<td>0.15</td>
<td>0.22</td>
</tr>
<tr>
<td>Multinational peacekeeping force present</td>
<td>-0.15</td>
<td>0.05</td>
<td>0.00</td>
</tr>
<tr>
<td>Ethnic conflict</td>
<td>0.24</td>
<td>0.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Conflict recurrence</td>
<td>-0.29**</td>
<td>-0.26***</td>
<td>-0.27***</td>
</tr>
<tr>
<td>N (post-conflict years)</td>
<td>353</td>
<td>408</td>
<td>407</td>
</tr>
</tbody>
</table>

Note: Robust standard errors in parentheses, clustered by country.
The only other consistently significant variables are conflict recurrence and, unsurprisingly, the country’s average Human Rights Protection score in the decade before the armed conflict began. The human rights climate in post-conflict states tends to improve over time, although the coefficient on this variable is not significant in models 3.2 and 3.3. Plotting annual human rights protection scores over the post-conflict decade suggests a nearly linear relationship between the number of years that have elapsed since a conflict ended (results not shown) and human rights conditions with average HRP scores rising approximately .03 points each year after conflict termination. Neither the duration of the conflict nor high government casualties are associated with human rights conditions after conflict termination. The presence of a post-conflict peacekeeping force also does not have a systematic effect on human rights protections in post-conflict societies. This may be because, as others have suggested, peacekeepers are sent to countries at highest risk of human rights abuses, or because our dichotomous measure fails to capture important differences among peacekeeping missions (Fortna 2004; Kathman and Wood 2014; Murdie and Davis 2010).

Figure 1 plots the predicted Human Rights Protection score in the post-conflict decade over arms imports as a percentage of GDP. All other variables are held constant at their mean value. We have reversed the transformation of the independent variable for ease of interpretation. The numbers along the x axis are rough approximations of the value of the weapons a country imported as a percent of its gross domestic product in the prior year. Although the data do not allow for point predictions, the figure makes it clear that human rights conditions generally decline as arms imports increase relative to GDP. Predicted HRP scores are highest in countries in which the value of arms transfers is low relative to GDP, and lowest in post-conflict countries that receive large arms transfers relative to their gross domestic product. Since these estimates are calculated holding GDP constant at its mean value, the results suggest that large transfers of weapons to post-conflict countries are associated with increases in state repression. If we assume that the proportion of arms transfers provided as (or purchased with) aid, as opposed to purchased with the government’s own revenues, increases as the value of the weapons increases relative to the country’s GDP, these results provide some evidence that foreign military assistance to post-conflict governments has a detrimental effect on human rights protections.

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4 SIPRI warns that its valuation of arms imports should not be directly compared to GDP. We do not claim that our measures provide accurate estimates of the value of arms imports relative to GDP (or the value of a country’s exports).
Figure 1. Predicted level of human rights protections as arms imports increase relative to GDP.

Discussion and Conclusion
What do the results imply about the arguments presented above? We can reject hypothesis 3, which predicted that foreign military assistance would be associated with a higher risk of conflict recurrence. Neither of the proxy measures of military aid are correlated with the risk of conflict recurrence. However, while it does not appear that arms transfers to post-conflict governments make it more likely an armed conflict will resume, evidence for a conflict suppressing effect is also absent.

The estimated effects of arms imports on human rights protections are substantial, statistically significant, and robust across model specifications, but this preliminary analysis cannot reliably establish a relationship between foreign military aid and post-conflict human rights practices. Moreover, these results provide little evidence about the causal mechanisms that might connect security assistance and conditions for human security after conflict termination. In future work, we plan to construct more valid
and reliable measures of foreign military assistance and look more closely at practices in post-conflict countries.

References


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