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Does Withdrawal of Troops after Military Intervention Reduce Rebel Groups?

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Abstract

How does the withdrawal of troops after a military intervention supporting the government affect the number of rebel groups in the long-term? This study argues that the withdrawal of foreign support for the government affects the number of rebels by directly provoking a nationalist backlash in the short term and threatening government legitimacy in the long term. Whether or not nationalism is provoked and whether legitimacy is enhanced or eroded depend on whether or not it was a humanitarian intervention. If rebels win, the intervention withdrawals also indirectly affect the number of rebel groups in the long-term through the militias’ presence. Using interrupted time-series estimates between 1961 and 2005, this study found that humanitarian intervention withdrawals decrease the number of rebel groups in the long-term, while non-humanitarian intervention withdrawals promote the growth of militias and increase the number of rebel groups.

Keywords: Military intervention; Civil war; Militias
In August 2021, the US withdrew its troops from Afghanistan after nearly 20 years of operations. Soon after, the Taliban took over. Militias began recruiting and arming volunteers (Gibbons-Neff & Rahim, 2021). In Somalia, after the Ethiopian intervention, al-Shabaab was considered the only militia group able to force the troops out; it gained support and gradually became a rebel group (Ingiriis, 2018). These two cases highlight the ways in which foreign interventions influence rebel groups in two ways. First, interventions sometimes lead to more armed groups, but not in other cases. Second, intervention withdrawals change conflict dynamics through the emergence of militias. How does the withdrawal of foreign intervention (non-humanitarian and humanitarian) influence the number of rebels in a conflictual society in the long-term? Previous studies have highlighted the effect of military interventions on the particular conflict or dyad level until the conflict ends (Balch-Lindsay & Enterline, 2000; Balch-Lindsay et al., 2008; Gent, 2008; Jones, 2017; Maekawa, 2019; Mason & Fett, 1996; Sullivan & Karreth, 2015). However, little is known of the long-term effects on conflict dynamics that the recipient government faces after the intervention withdrawals. Understanding the long-term consequences of interventions on country-level rebellions is pertinent, as intervention aims at enhancing public safety and political stability after forces leave (Kaufmann, 1996).

Accordingly, this study investigates the effect of the military intervention withdrawals on the number of rebels. This study argued that the withdrawal of foreign
support for the government affects the number of rebels by directly arousing a nationalist
backlash in the short-term and threatening government legitimacy in the long-term. Whether
or not nationalism is provoked and whether legitimacy is enhanced or eroded depend on
whether or not it was a humanitarian intervention. If the rebels win, the intervention
withdrawals also indirectly affects the number of rebel groups in the long-term through the
presence of militias. Using interrupted time-series estimates (ITS) between 1961 and 2005,
the study shows that in the case of non-humanitarian intervention, the withdrawal decreases
the number of rebels over time. Moreover, mediation analysis indicates that non-humanitarian
intervention increases the presence of militias. This indirectly increases the number of rebels.
This finding implies that the effects of the non-humanitarian intervention withdrawals on the
number of rebels lie in its indirect effects through presence of militias, rather than any direct
effect. This analysis implies that conflict dynamics are changed through the informal non-
state armed groups that are activated after an intervention.

**Military Intervention, Civil War, and Conflict Dynamics**

Research has highlighted conflict-level and actor-centered approaches to explain how
military interventions influence civil wars. For instance, one strand of research has argued
that interventions shift the capability of the actors involved (Elbadawi & Sambanis, 2000;
Jones, 2017; Regan, 2002; Sullivan & Karreth, 2015). This in turn affects the durations and
outcomes of civil wars (Balch-Lindsay & Enterline, 2000; Balch-Lindsay et al., 2008;
The key to any intervention strategy is to alter the calculations of the outcome of the conflict (Regan, 1996). Capability shifts alter actors’ calculations by influencing the costs of additional conflict (Mason & Fett, 1996) and the probability of winning (Balch-Lindsay & Enterline, 2000). Interventions supporting rebels increase the likelihood of a rebel victory or a negotiated settlement (Balch-Lindsay et al., 2008; Gent, 2008; Jones, 2017). Power parity resulting from interventions helps rebels extract greater concessions and helps the government buy them off, making a negotiated settlement more likely (Regan, 2002). Such a change in the probability of winning through interventions influences conflict outcomes and causes conflict actor fragmentation. For instance, interventions supporting rebel groups motivate them to cooperate and unify (Lounsbery, 2016), especially when the sponsor is shared (Popovic, 2018).

However, military interventions have effects beyond the conflict level. One key finding is that foreign troops increase regime challenges by facilitating recruitment through nationalist sentiments (Choi & Piazza, 2017; Fearon & Laitin, 2000). Pro-government interventions lead to an increase in suicide tactics at country-level (Choi and Piazza, 2015). When one of the warring parties receives external military support, the number of groups at the system level increases (Quinn et al., 2019). Thus, the presence of foreign troops aggravate rebellions.
The overlooked aspects of military intervention and conflict dynamics are not only conflict versus country-level consequences, but also short-term versus long-term consequences. Research has focused on the effects of military interventions until a conflict ends (Balch-Lindsay & Enterline, 2000; Balch-Lindsay et al., 2008; Gent, 2008; Jones, 2017; Maekawa, 2019; Mason & Fett, 1996; Sullivan & Karreth, 2015). However, recent studies have shown that the legacy of interventions matters in conflict dynamics through the previous combatants’ willingness and opportunities to remobilize, influencing the conflict recurrence (Karlén, 2017). MacFarlane (1984) argued that an implication of foreign military intervention is that the target state is incapable of managing its affairs, conveying a sense of eroded sovereignty that is likely to persist. However, regardless of the assumption that the legacy of intervention matters, many empirical studies focus on the effects of foreign troops being deployed. Although the long-term consequences of interventions have been evaluated in the context of democratization (Bueno de Mesquita & Downs, 2006) and quality of life (Kisangani & Pickering, 2015), this has not been done in the context of conflict dynamics.

Regarding factors that explain the number of rebels, recent studies of rebel fragmentation show that rebels proliferate because of internal factors such as government accommodation (Fjelde & Nilsson, 2018), the peace process (Duursma & Fliervoet, 2021), widespread grievances (Mosinger, 2018), or represented issues (Perkoski, 2019). Regarding external factors, researchers have shown that interventions unify rebels at the conflict level.
(Lounsbery, 2016; Popovic, 2018) or increase their number at the conflict system level (Quinn et al., 2019). If interventions affect the proliferation of rebels, intervention withdrawal could also change the conflict dynamics.

This study aims to integrate the short-term and long-term consequences of military interventions and facilitate a better understanding of how military interventions influence conflict dynamics at the country level.

**Theoretical Argument: Withdrawal of Troops after Military Interventions Supporting the Government**

This study argues that the withdrawal of foreign troops supporting the government affects the number of rebels, directly influencing a nationalist backlash in the short-term and government legitimacy in the long-term. Whether nationalism is provoked or unprovoked, and the legitimacy of the government is enhanced or eroded depends on the whether it is humanitarian or non-humanitarian missions being withdrawn. If the rebels win, the troop withdrawal also indirectly affects the number of rebel groups in the long-term through the rise of pro-government militias (PGMs). The detailed logic is presented below, using rational choice as the major framework.

**Defining humanitarian and non-humanitarian interventions**

Although there is still no definitive legal standard for humanitarian intervention, the distinction between humanitarian intervention and war remains politically important (Paris
Humanitarian intervention is perceived as defending civilians under threat (Paris, 2004). Its motivation can be defined as saving lives, relieving suffering, and distributing foodstuffs to prevent starvation (Pickering & Kisangani, 2009). In contrast, the motivation of non-humanitarian intervention can be self-interested, reflecting the agent’s own preferences (Cunningham, 2010; Maekawa, 2019). It is the interveners who bear the cost of intervention. Thus, they are likely to act in their own interests. The difference is theoretically pertinent to the consequences of intervention withdrawal. Interventions defending civilians under threat and those focusing on self-interest generate different paths in terms of nationalist backlash and government legitimacy.

**Short-term effect of intervention withdrawal: Changes in nationalist backlash**

During interventions, a nationalist backlash among local citizens arises if the interventions are considered an affront to sovereignty (Choi & Piazza, 2017; Russell & Sambanis, 2022). Some interventions preserve and enhance sovereignty (MacFarlane, 1984): Non-humanitarian intervention provokes nationalist backlash, while humanitarian interventions do not. Military occupations are often viewed as an illegitimate usurpation of the population’s sovereignty, inducing nationalist resistance (Edelstein, 2009). Nationalist sentiments sparked by foreign intervention facilitate the recruitment of potential regime opponents (Fearon & Laitin, 2000; Lyall & Wilson, 2009). A nationalist backlash may diminish after the withdrawal of military intervention and decrease the number of rebels in the short term, reducing the combatants’
motivations for commitment to rebel groups. In contrast, humanitarian intervention often occurs in troubled societies unable to create well-ordered regimes, and the goal of the intervention is to restore full sovereignty to the troubled society (Keohane, 2003). The population then sees the interveners as acting to augment sovereignty. In particular, the UN as an intervener mitigates the population’s impatience with a foreign presence (Edelstein, 2009). Thus, the short-term effect of withdrawal on the reduction in rebels is greater in the case of non-humanitarian intervention. The first hypothesis is derived from these discussions:

**Hypothesis 1a:** Withdrawal of humanitarian military intervention supporting the government does not influence the number of fighting rebels in the short term.

**Hypothesis 1b:** Withdrawal of non-humanitarian military intervention supporting the government decreases the number of fighting rebels in the short term.

**Long-term effects of intervention withdrawal: Changes in government legitimacy and militia presence**

To some extent, the government’s legitimacy is instrumented by a leader who is installed during the intervention. Whether the government’s legitimacy after the intervention can be enhanced or not depends on whether the population sees the leader as in alignment with the population or with the intervener. After the intervention, the population increases expectations about governing themselves following the recovery of sovereignty. Thus, the withdrawal of intervention makes the leader’s loyalty more apparent to the population’s eye.
A leader who is non-loyal to the intervener but aligned with the population’s interest is more likely to obtain legitimacy.

In many cases, military interventions, both humanitarian and non-humanitarian, seek to enhance the legitimacy of the host government. However, because interventions are costly for the interveners, they may have an incentive to install a loyal leader who will protect their interests that are not in line with the receiver country’s ideal points (Lake, 2016). Such loyal leaders can be installed at the expense of government legitimacy. This study argues that the incentive to install a loyal leader is greater in non-humanitarian intervention. Humanitarian interventions are human-security-driven, aligning with the population’s ideal point. They also reduce the cost of interventions through burden-sharing. Both humanitarian and non-humanitarian interventions engage in a winning-the-hearts-and-minds strategy that raises the costs of intervention. However, the burden-sharing of humanitarian interventions enables a focus on the interests of the population; otherwise, the interveners pursue their own policy preferences to compensate for the cost.

The principal function of military intervention is to provide additional military capacity (Sullivan & Karreth, 2015). The enhanced military capacity enables the government to provide protections for humanitarian activities. This supplement its responsibility to protect its citizens by providing food, water, and medical treatment. For instance, in Afghanistan, the US forces created their own systems for aid delivery (Mitchell, 2017), and
some Afghans saw no distinction between the military and foreign non-governmental organizations (NGOs; Olson, 2006). The presence of foreign troops assists effective aid delivery, enhancing the perceptions of state legitimacy (Böhnke & Zürcher, 2013). Although this winning-the-hearts-and-minds strategy could increase popular support, it requires resources, increasing the costs to interveners.

This study argues that burden-sharing of humanitarian intervention mitigates such costs to interveners. Burden-sharing involve financial contributions, troop supplies, or both to UN or non-UN missions (Sandler, 2017). Humanitarian missions produce public-goods benefits for the world community by improving the well-being of those in need, while enabling contributor-country-specific benefits such as status enhancement, stability of the neighborhood, and economic benefits (Shimizu & Sandler, 2002). Such cost mitigation through burden-sharing and benefits enable interveners to focus on the population’s interests instead of establishing a puppet, a loyal leader. By installing a leader closer to the population’s interests, legitimacy is enhanced.

Such levels of leader loyalty differentiate the levels of legitimacy after intervention withdrawal. Leaders who are loyal to the interveners are considered less legitimate by the population. This offers opposition groups room to challenge the legitimacy of the government, thereby facilitating mobilization (Wimmer et al., 2009).\(^3\) Thus, the number of rebels that seek to replace the central government increases. In contrast, in the case of
humanitarian intervention withdrawal, the enhanced legitimacy of the leader induces social compliance with the extractions and constraints without increasing popular grievances. The reduction in grievances reduces rebelliousness (Gurr, 1970).

It is possible that instead of an intervention successfully establishing new leaders or consolidating existing ones, rebels win after the intervention. Failed interventions damage the intervening state’s external credibility and undermine domestic political approval (Eichenberg, 2005; Keller et al., 2020). This increases the political cost of renewed interventions for the intervening state. When rebel groups win, expectations of renewed support for the old regime decrease. With time, the challenger becomes increasingly uncertain as to whether the previous commitment by the intervening state(s) will hold (Karlén, 2017).

In such situations, new militias or militias who used to serve the foreign troops start recruitment to defend their interests. Militias serving to foreign troops as a counterinsurgency strategy is common (Schneckener, 2017). Foreign occupying powers rely on local militias (Kalyvas, 2008), who have local knowledge and can gather intelligence (Kalyvas, 2006). For instance, in Afghanistan, the US planned to recruit and train militias, and patrolled villages to this end (Filkins, 2009). In Iraq, the US coalition forces utilized the Sunni Awakening militia (Clayton & Thomson, 2014). Such militias can become active when security forces become dysfunctional upon the foreign troop withdrawal, as they link their interest to the common public good of providing security (Schneckner, 2017). After the regime falls, PGMs may
position themselves in opposition to the new government and support the rebels (Aliyev, 2019). Even if the government survives after the troop withdrawal, such withdrawals force governments to manage their security affairs themselves, making them tactically use PGMs to supplement their regular armed forces (Jentzsch et al., 2015). After foreign troops depart, the compromise on the monopoly over violence can shift from foreign troops to PGMs. The presence of multiple militias can encourage violence against each other, which accompanies support from different ethnic groups, in leading to another conflict such as that seen in the Republic of Congo (Steinert et al., 2019). The presence of militias also results in a higher risk of civil war (Carey et al., 2012).

Based on these discussions, the following hypotheses are derived:

*Hypothesis 2a:* Withdrawal of humanitarian military intervention supporting the government decreases the number of fighting rebels over time.

*Hypothesis 2b:* Withdrawal of non-humanitarian military intervention supporting the government increases the number of fighting rebels over time.

**Research Design**

The sample comprises data for 45 countries that experienced military intervention in support of the government between 1961 and 2005. Only countries that experienced military intervention are included; these were identified using the International Military Intervention
(IMI) dataset (Pickering & Kisangani, 2009). As intervention under separate military
commands is coded as discrete interventions in this dataset, the information on military
intervention was aggregated at the country–year level. The sample only includes countries in
which military interventions favored the government (Pickering & Kisangani, 2009). The
intervention episodes were included when the target states matched with a government that
had experienced a civil war, which was identified using the Uppsala Conflict Data Program
(UCDP) Dyadic Dataset version 20.1 (Harbom et al., 2008; Pettersson et al., 2021). The
sample also includes interventions if they were peacekeeping missions or UN interventions,
as these support the government (Karlsrud, 2015). Detailed information on sample
construction is presented in Section 1 of the Appendix. As this study aims at differentiating
between long- and short-term effects, the ITS model was used to operationalize the
independent variables, as explained in the model specification section. The unit of analysis is
country–year. Two samples were used for analysis, one constructed from humanitarian
intervention episodes and the other from non-humanitarian ones. Humanitarian intervention
was identified using the IMI dataset (Pickering & Kisangani, 2009).

The dependent variable is the number of fighting rebels in a country in a given year.
To identify active fighting rebels, UCDP Dyadic Dataset Version 20.1 was used (Harbom et
al., 2008; Pettersson et al., 2021). As the distribution of this variable is positively skewed, a
binomial distribution could yield a more general estimator (King, 1989). Thus, negative
binomial regression was used for the analysis.

Several control variables assumed to influence both the troop withdrawal and the number of rebels were included. First, as country characteristics, this study controlled for Polity2, GDP p.c., Population, and Ethnic fractionalization. On the one hand, a country may intervene in civil wars to liberalize the political institutions of target states (Hermann & Kegley, 1998; Peceny, 1995; Pickering & Peceny, 2006). Once this aim is achieved, foreign states may withdraw their troops. On the other hand, the middle range of regime score, anocracy, has a high probability of civil war (Hegre et al., 2001), implying that the regime type and the number of rebels may form a curvilinear relationship. Therefore, this study includes the original and quadratic terms of Polity2 from the Polity V Dataset (Marshall & Gurr, 2018). GDP p.c. and Population have been considered important variables in civil war models (Fearon & Laitin, 2003). Fearon and Laitin (2003) revealed GDP p.c. is negatively associated with civil wars and a large population may facilitate the recruitment of rebels. These risk factors may influence the demand for troops to stay longer, influencing the intervention withdrawals. Thus, this study controls for the log transformed version of GDP p.c. and Population from the Varieties of Democracy Dataset (Coppedge et al., 2020; Pemstein et al., 2020). Although ethnic fractionalization is thought to have no direct effects on the onset of civil war (Fearon & Laitin, 2003), it does have indirect effects that increase the risk (Blimes, 2006). This study controls for Ethnic fractionalization from the Historical
Index of the Ethnic Fractionalization Dataset (Drazanova, 2020).

This study controlled for *Cumulative intensity* and several conflict termination outcomes. As cumulative intensity increases, states may be less likely to withdraw troops because of the high conflict stakes. The number of deaths from past rebellions influence present rebellions (Lichbach & Gurr, 1981). The information on cumulative intensity was taken from the UCDP Armed Conflict Dataset (Gleditsch et al., 2002; Pettersson & Öberg, 2020). As the troop withdrawal could take place both during and after the civil war, conflict outcomes are expected to influence troop withdrawals. One side’s victory implies a success or failure of interventions, leading to the termination of intervention. Many peace agreements include promises of troop withdrawals. Additionally, it is possible that troops withdraw when the rebels become weak and enter into low activity. Conflict outcomes also influence the number of rebels. Combatants are unable to credibly guarantee the terms of agreement in negotiated settlement (Walter, 1997), causing commitment problems that make conflict recurrence more likely than the one-sided victory. Signing a peace agreement may facilitate the creation of splinter groups, making extreme sub-groups choose to continue rebellion. However, the implementation of a peace agreement becomes a signal of the political willingness and capacity of the government to implement security, political, and social reforms to other rebel groups, reducing systemic conflict (Quinn et al., 2019). Thus, this study controlled for *Peace agreement, Government victory,* and *Rebel victory* as conflict
outcomes. The data were drawn from the UCDP Conflict Termination Dataset version 2-2015 (Kreutz, 2010). As there might have been more than one conflict termination outcome in a country in a given year in the event of multiple rebel groups, the information was aggregated at the country–year level. Therefore, these variables were coded 1 if there was at least one such outcome in a given year. The excluded reference category is low activity.

Finally, this study controlled for Cold War and Hostile intervention. During the Cold War, states might have refrained from troop withdrawals as they may have been seen as a sign of being less resolute, jeopardizing their reputation. The end of the Cold War is also influenced the number of rebels through the ideology of self-determination. The Cold War variable took the value of 1 if the year was before 1991, and 0 otherwise. This study also included the presence of hostile interventions to account for the temporal dynamics of interventions (Aydin & Regan, 2012). Support for rebels increases the risk of conflict recurrence (Karlén, 2017). The Hostile intervention variable takes the value 1 if there was a hostile intervention in a given year, and 0 otherwise.

Model specification

To test the hypotheses, the ITS model was used, as it allows us to assess how much an intervention changed an outcome of interest, both immediately and over time; instantly or with delay; and transiently or long-term (Wagner et al., 2002). As this study is interested in how intervention withdrawals influence the number of rebels immediately and in the long-
term, this study uses the ITS model, which is as follows:

\[ y_{i,t}^* = \beta_0 + \beta_1 T_t + \beta_2 Withdrawal \ level_t + \beta_3 Withdrawal \ trend_t + \sum c_i Z_{i,t-1} \]

\( T \) is the time since the last intervention; it resets when a new intervention begins after a period of no intervention. \( \beta_0 \) represents the baseline level at \( T = 0 \). \( \beta_1 \) represents the change in outcome associated with a time unit increase. \( Withdrawal \ level \) is a dummy variable indicating the pre-withdrawal (coded 0) or post-withdrawal (coded 1) period. \( \beta_2 \) is the level change following the withdrawal of troops after military intervention, capturing the immediate effect of such withdrawal. \( Withdrawal \ trend \) is coded 0 for observations before the intervention withdrawals and increased by 1 for observations after (1, 2, 3, 4…). \( \beta_3 \) is the slope change following such withdrawals. A one-year lag for the set of control variables \( (Z_{i,t-1}) \) is used. An episode of intervention is consistent with the measurement of the \( T \) variable. It resets the episode when a new intervention begins after periods of no intervention.

The length of the post-withdrawal period was restricted to 10 years, meaning that the maximum value of \( Withdrawal \ trend \) is 10, to attribute a causal effect of withdrawal on rebel groups. However, considering that 10 years might be short to claim a long-term effect, the latter part of the analysis relaxed this length restriction. There were 23 intervention episodes in the humanitarian sample and 38 episodes in the non-humanitarian sample; the humanitarian intervention sample contained 18 countries and 144 observations, while the non-humanitarian intervention sample had 29 countries and 418 observations.⁷
The model does not include a lagged dependent variable. Inclusion of a lag may result in biased estimates (Keele & Kelly 2006). Instead of a lagged dependent variable, the cumulative intensity variable was used to account for the fact that past rebel groups have an effect on current ones. The lagged cumulative intensity and log of number of fighting rebels were significantly correlated with a correlation coefficient of 0.746 and a p-value of less than 0.01. The mean score of the variance inflation factor for the humanitarian sample was 2.04, whereas that of the non-humanitarian sample was 1.57, implying that there was no problem of multicollinearity.

**Results and Discussion**

Table 1 presents the results of the ITS model (negative binomial regression) of the humanitarian troop withdrawal and the number of all fighting rebels. While Model 1 is a model with a restricted period (Withdrawal trend < 11), Model 2 lacks such a restriction. Regarding humanitarian interventions, there were no cases of rebel victory. Table 1 shows that the immediate effect of the intervention withdrawal (Withdrawal level variable) does not have statistically significant effects on the number of fighting rebels. The result supports Hypothesis 1a. Withdrawal trend was negative and statistically significant, indicating that for each year after the troop withdrawal after a humanitarian military intervention, the number of fighting rebels decreases. Figure 1 plots the effect of the troop withdrawal after humanitarian military intervention on the number of fighting rebels over time with 95% confidence.
intervals obtained from Model 1. This prediction assumes that troop withdrawal happened at time 5. In calculating the predicted values, the mean values of continuous variables and median values of dummy variables were used as the values of other variables. This shows that the number of fighting rebels significantly reduced over time after the humanitarian military intervention, and this result remains when the sample with non-restricted length was used (Model 2 in Table 1). The results thus support Hypothesis 2a.

Table 2 presents the results obtained from the ITS models (negative binomial regression) of the troop withdrawal after a non-humanitarian military intervention favoring the government and the number of all fighting rebels. It shows that the immediate effect of the intervention withdrawal (*Withdrawal level* variable) is not significant. Additionally, *Withdrawal trend* does not have a statistically significant effect. Figure 2 plots the effect of the non-humanitarian military intervention withdrawal on the log of the number of fighting rebels over time with 95% confidence intervals obtained from Model 1. In calculating the predicted values, mean values for continuous variables and median values for dummy variables were used as the values of other variables. The results do not support Hypotheses 1b and 2b. The following extension analysis section unpacks the results.

[Insert Table 1 here]

[Insert Table 2 here]
Regarding the control variables, *peace agreement* has a consistently negative and statistically significant effect across samples. While past research noted the fragility of a negotiated settlement (Walter, 1997), this paper shows that a negotiated settlement reduces the number of rebels in the following year. This may be because the implementation of peace agreements becomes a signal of political willingness (Quinn et al., 2019). Cumulative intensity behaved as expected, showing statistically significant positive effects.

**Extensions**

This extension section analyzes a causal mechanism proposed in the theory. This study argued that the intervention withdrawal may encourage PGMs to become active and cause new conflicts. The extension analysis conducted a mediation analysis, relying on the causal mediation analysis developed by Imai et al. (2011). The Pro-Government Militias Database (Carey et al., 2012) was used to identify whether PGMs existed in the past. Based on the information available on PGMs, the year range was reduced to 1981–2005.

As a mediator, *PGMs existed*, which took the value of 1 if PGMs existed in a country in the past, was used, while *Withdrawal trend* was the treatment. The first mediator model used *PGMs existed* as the dependent variable, and covariates used in the main analysis
were included. Next, the log of the number of fighting rebels was used as the outcome variable. The outcome model is a function of the mediator, the treatment variable, and the same covariates as were used in the mediator model. The outcome model used a linear regression model with least squares, and the mediator model used a logistic regression model. Appendix Tables D and E present the results for the mediator and outcome models for humanitarian intervention, while Tables F and G do so for non-humanitarian intervention, respectively.

As the treatment variable was continuous, the values of 1 and 20 for the control and treatment values were used to estimate the direct, indirect, and total effects. Figures 3 and 4 present the results of the mediation analysis where 1,000 simulations of the quasi-Bayesian Monte Carlo method were implemented using the R package “mediation” (Tingley et al., 2014). In the case of humanitarian intervention, the average indirect effect of the Withdrawal trend on the number of fighting rebels that goes through the mediator was -0.148 with 95% confidence intervals of [-0.248, -0.05]. In the case of non-humanitarian intervention, the average indirect effect was 0.025 with 95% confidence intervals of [0.0006, 0.06]. The results for the indirect effect indicate that in the case of humanitarian intervention, through the existence of PGMs, the number of rebels decreases over time. This may be because of the conflict outcomes. As mentioned in the Appendix, there were no rebel victories in the humanitarian intervention sample. Therefore, the PGMs might have remained pro-
government without switching sides. The loyal PGMs could be deployed in counterinsurgency tasks and work to undermine rebel support bases (Aliyev, 2019), weakening the existing rebels and preventing the proliferation of rebels. Moreover, a reduced concern over threats to authority decreases demands for the emergence of new militias. In contrast, in the case of non-humanitarian intervention, previously existing PGMs might have switched sides because of rebel victory. Thus, the danger is that the PGMs may switch sides after withdrawal, becoming rebels in the long term. These findings from the mediation analysis partially support Hypothesis 2b that non-humanitarian military intervention withdrawal supporting the government increases the number of fighting rebels over time. In the case of non-humanitarian intervention, there is an indirect positive effect of the withdrawal on the number of rebels through the presence of militias.

[Insert Figure 3 here]

[Insert Figure 4 here]

**Conclusion**

Military interventions favoring governments are important forms of international cooperation during civil wars. At some point, they end with the departure of troops. However, little is known of the long-term consequences that the recipient government faces. This study argued
that the intervention withdrawal affects the number of rebels by directly arousing a nationalist backlash in the short-term and threatening government legitimacy in the long-term.

Nationalism is provoked or unprovoked, and legitimacy is enhanced or eroded depending on the whether it was humanitarian or non-humanitarian missions being withdrawn. If rebels win, the troop withdrawal also indirectly affects the number of rebel groups in the long-term through the presence of the militias. This study found that in the long-term, the humanitarian intervention withdrawal decreases the number of fighting rebels. The results of mediation analysis show an indirect effect on the number of rebels through the existence of PGMs. This finding implies that the effects of non-humanitarian intervention withdrawal on the number of fighting rebels lie in the *indirect* effect through the presence of militias rather than the *direct* effect.

This study makes several contributions. First, it makes a unique contribution to the literature on civil war intervention by integrating insights into the effect of military interventions at a conflict level (Akcinaroglu & Radziszewski, 2005; Balch-Lindsay & Enterline, 2000; Balch-Lindsay et al., 2008; Gent, 2008; Jones, 2017; Karlén, 2017; Mason & Fett, 1996; Sullivan & Karreth, 2015) and the country-level consequences of military interventions (Choi & Piazza, 2017). Second, the finding that the non-humanitarian intervention withdrawal increases the number of rebels in the long-term through militias presence highlights the dilemma that efforts to manage conflict incur long-term
consequences. Assuming that interventions are a form of conflict management, the first preference of the intervener is to end the conflict (Regan, 2002). However, this study articulates the dilemma that in the long-term, a third-party intervention may provoke other conflicts. Third, this study advances a research agenda that examines the legacy of external interventions in the long-term (Bueno de Mesquita & Downs, 2006; Karlén, 2017; Kisangani & Pickering, 2015).

These findings have policy implications for policymakers of both the troop-supplier country and of the recipient country. First, to prevent armed proliferation, both countries may want to keep an eye on informal non-state armed groups—militias—that used to serve foreign troops. Second, the supplier country may consider long-term costs that the recipient country pays, such as eroded notion of sovereignty and undermined legitimacy, before it decides to provide troops to the target state. Finally, the government of the recipient country may encounter greater risks of political instability both during and after military interventions, if such interventions cannot enhance its legitimacy.

Several avenues for future research exist. First, future research could investigate the effect of territorial control or loss during interventions on post-intervention conflict dynamics through detailed case studies that trace a mechanism regarding whether areas controlled by foreign troops also turn into mobilization spots after such troops leave. Second, future research can investigate changes in the legitimacy of the recipient government following
intervention withdrawal regarding types of interveners. It is possible that if interveners are continental compatriots such as the African Union in Africa, the government’s legitimacy may be preserved. Third, the time dimension of post-intervention can also be studied to identify critical junctures of political instability. These studies can enhance our understanding of the potential risks of the recipient country’s long-term political instability due to military interventions, and identify potential conflict management approaches following intervention withdrawal.
### Table 1. ITS models (negative binomial regression) of humanitarian military intervention withdrawal and number of all fighting rebels

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<td></td>
<td>Restricted&lt;11 years</td>
<td>Unrestricted</td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td>0.018 (0.037)</td>
<td>0.025 (0.035)</td>
</tr>
<tr>
<td>Withdrawal level</td>
<td></td>
<td>0.075 (0.370)</td>
<td>−0.255 (0.493)</td>
</tr>
<tr>
<td>Withdrawal trend</td>
<td></td>
<td>−0.304*** (0.060)</td>
<td>−0.153** (0.071)</td>
</tr>
<tr>
<td>Hostile intervention___t____1</td>
<td></td>
<td>0.526 (0.324)</td>
<td>0.604* (0.309)</td>
</tr>
<tr>
<td>Polity2_t__1</td>
<td></td>
<td>−0.034 (0.025)</td>
<td>−0.039* (0.023)</td>
</tr>
<tr>
<td>Polity2^2_t__1</td>
<td></td>
<td>−0.016*** (0.005)</td>
<td>−0.018*** (0.005)</td>
</tr>
<tr>
<td>Peace agreement___t____1</td>
<td></td>
<td>−1.200*** (0.399)</td>
<td>−1.234*** (0.400)</td>
</tr>
<tr>
<td>Government victory___t____1</td>
<td></td>
<td>−27.526*** (0.737)</td>
<td>−28.742*** (0.681)</td>
</tr>
<tr>
<td>GDP p.c.___t____1 (ln)</td>
<td></td>
<td>0.309 (0.225)</td>
<td>0.240 (0.218)</td>
</tr>
<tr>
<td>Population___t___1 (ln)</td>
<td></td>
<td>0.134 (0.148)</td>
<td>0.216* (0.130)</td>
</tr>
<tr>
<td>Ethnic fractionalization___t____1</td>
<td></td>
<td>0.215 (0.390)</td>
<td>0.117 (0.381)</td>
</tr>
<tr>
<td>Cumulative intensity___t____1</td>
<td></td>
<td>1.238*** (0.288)</td>
<td>1.303*** (0.277)</td>
</tr>
<tr>
<td></td>
<td>Model (1)</td>
<td>Model (2)</td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------</td>
<td>-----------------</td>
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</tr>
<tr>
<td></td>
<td>Restricted&lt;11 years</td>
<td>Unrestricted</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td>−0.021 (0.018)</td>
<td>−0.012 (0.018)</td>
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</tr>
<tr>
<td>Withdrawal level</td>
<td>−0.243* (0.132)</td>
<td>−0.230* (0.124)</td>
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</tr>
<tr>
<td>Withdrawal trend</td>
<td>−0.028 (0.023)</td>
<td>−0.028 (0.021)</td>
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<tr>
<td>Hostile intervention_{t−1}</td>
<td>−0.003 (0.140)</td>
<td>0.117 (0.114)</td>
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</tr>
<tr>
<td>Polity2_{t−1}</td>
<td>−0.033*** (0.013)</td>
<td>−0.027*** (0.010)</td>
<td></td>
</tr>
</tbody>
</table>

Standard errors are clustered on intervention episode. *p < 0.1, **p < 0.05, ***p < 0.01

Table 2. ITS models (negative binomial regression) of non-humanitarian military intervention withdrawal and number of all fighting rebels

Cold War: −0.381 (0.294) −0.342 (0.311)

Constant: −5.037** (2.314) −5.848*** (2.153)

Observations: 144 177
Log likelihood: −100.744 −107.072
Wald χ²: 1948.15 3404.61
Prob > χ²: 0.000 0.000
Akaike Information Criterion: 229.489 244.144

* subsequent interventions
<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient 1</th>
<th>Coefficient 2</th>
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</thead>
<tbody>
<tr>
<td>Polity2_{t-1}</td>
<td>0.004 (0.003)</td>
<td>0.004 (0.003)</td>
</tr>
<tr>
<td>Peace agreement_{t-1}</td>
<td>-2.373**(0.940)</td>
<td>-2.469*** (0.922)</td>
</tr>
<tr>
<td>Government victory_{t-1}</td>
<td>-0.851*(0.464)</td>
<td>-0.843* (0.468)</td>
</tr>
<tr>
<td>Rebel victory_{t-1}</td>
<td>-0.227 (0.271)</td>
<td>-0.235 (0.240)</td>
</tr>
<tr>
<td>GDP p.c_{t-1} (ln)</td>
<td>0.027 (0.094)</td>
<td>0.073 (0.102)</td>
</tr>
<tr>
<td>Population_{t-1} (ln)</td>
<td>0.298*** (0.095)</td>
<td>0.262*** (0.089)</td>
</tr>
<tr>
<td>Ethnic fractionalization_{t-1}</td>
<td>1.511*** (0.408)</td>
<td>1.855*** (0.401)</td>
</tr>
<tr>
<td>Cumulative intensity_{t-1}</td>
<td>1.570*** (0.275)</td>
<td>1.913*** (0.276)</td>
</tr>
<tr>
<td>Cold War</td>
<td>0.037 (0.130)</td>
<td>-0.062 (0.112)</td>
</tr>
<tr>
<td>Constant</td>
<td>-7.044*** (1.379)</td>
<td>-7.300*** (1.420)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summary Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Observations</td>
<td>418</td>
</tr>
<tr>
<td>Log likelihood</td>
<td>-356.396</td>
</tr>
<tr>
<td>Wald $\chi^2$</td>
<td>391.26</td>
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<tr>
<td>Prob &gt; $\chi^2$</td>
<td>0.000</td>
</tr>
<tr>
<td>Akaike Information Criterion</td>
<td>744.792</td>
</tr>
</tbody>
</table>

Standard errors are clustered on intervention episode. *$p < 0.1$, **$p < 0.05$, ***$p < 0.01$
**Figures**

Figure 1. Effect of the humanitarian military intervention withdrawal on the log of the number of fighting rebels over time

![Figure 1](image1.png)

Figure 2. Effect of the non-humanitarian military intervention withdrawals on the log of the number of fighting rebels over time

![Figure 2](image2.png)
Figure 3. Results of the causal mediation analysis with 95% confidence intervals (humanitarian intervention)\(^8\)

Figure 4. Results of the causal mediation analysis with 95% confidence intervals (non-humanitarian intervention)
References


Karlsrud, J. (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(1), 40-54.


Pemstein, D., Marquardt, K. L., Tzelgov, E., Wang, Y-T., Medzhorsky, J., Krussell, J., Miri, F., & Römer, J.


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1 The example of Afghanistan has been used as anecdotal evidence. In this study, “civil war” is defined as internal, internationalized internal, and extrasystemic armed conflict that caused at least 25 battle-related deaths in a calendar year (Gleditsch et al., 2002; Pettersson & Öberg, 2020).

2 The concept of nation contains the desire of members of a historically differentiated ethnic group to govern themselves, and in this sense, nationalism precedes the nation (O’Leary & Sambanis 2018). Thus, nationalist backlash could be present in a troubled society, which could often be the target of intervention.

3 Although Wimmer et al. (2009) referred to political legitimacy, which comes from ethnic exclusion, they argued...
that a decrease in political legitimacy makes it easier for political leaders to mobilize.

4 To simplify the argument, the following theory assumes that this case, where rebels win, could happen in the case of non-humanitarian intervention, but is not rare in humanitarian intervention. As will be explained in the empirical section, there were no cases of rebel victory in this sample for analysis.

5 The Appendix explains why some intervention episodes are not included in the sample.

6 The original dataset was merged with country-level information on cumulative intensity. Consequently, information was missing for the years in which there were no civil conflicts. For the missing years, 0 was inserted. Thus, once conflict was terminated, cumulative intensity was 0.

7 This study split samples into two—non-humanitarian and humanitarian intervention—because to see whether the effect of troop withdrawal depends on the types of intervention, interaction terms would be required, but this would be difficult to interpret in the case of the ITS model.

8 ACME stands for the estimated average causal mediation effects while ADE stands for average direct effects.