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When and how militias disband?

Global patterns of pro-government militia demobilisation in civil wars

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Abstract: The research to-date on pro-government militias demonstrates that numerous pro-regime militia groups were actively deployed in civil wars over the last half a century. As hundreds of militia groups emerged amid civil warfare, hundreds more were disbanded, integrated into regular military or transformed into political forces. This study seeks to improve our understanding of global patterns of militia demobilisation. In contrast to the growing body of literature that explores the emergence of militias or examines their relationship with the state, studies on the demise of pro-government militias are notable by their absence. Statistical analysis of 220 pro-government militias involved in 75 civil wars from 1981 to 2011, based on a recent database of pro-government militias, demonstrates that the disappearance of militias has little to do with the termination of armed conflict. This study is first to investigate when and under which conditions militias created to assist governments in fighting civil wars disband.

Keywords: armed conflict, armed groups, pro-government militias, paramilitary, civil war

The past decade had witnessed radical transition from the perception of intrastate conflict as a dyadic phenomenon involving governments and rebels, towards a multi-actor model
accounting for the involvement of numerous non-state actors. Of all other extra-state actors, pro-government militias (PGMs) have been a prominent attribute of most civil wars from the Cold War period to the present day. As estimated by Carey, Colaresi and Mitchell, 58% of pro-government militias emerged in the midst of civil wars and over 80% of civil wars since 1989 employed at least one PGM at various phases of the conflict. From the Peruvian Rondas Campesinas and Argentina’s “Working Groups” to the Sudanese Janjaweed and Serb “Arkan’s Tigers,” PGMs never disappeared from the civil wars’ lexicon. More recent armed conflicts have led to the emergence of such militia groups as the Iraqi Shiite militia (al-Hashed al-Sha’bi), Ukrainian Volunteer Battalions (Volontery), the Yemeni Popular Committees, Nigeria’s Civilian Joint Task Force, Syrian Shabihha, as well as numerous Libyan PGMs. Although research on pro-government militias only began burgeoning over the past several years, the existing literature on militia violence offers a compelling account on the emergence, functions and performance of PGMs. A growing number of theoretical works is matched by even greater body of empirical literature.

The current literature on PGMs, however, does little to explain when and how PGMs cease to exist. Which factors account for the demise of militia organisations? When and how militias involved in civil wars disband? As observed by Jentzsch and her co-authors, little is known as to what happens to militias after the end of civil wars. Some studies have observed that PGMs may prove resilient to changes even when the conditions on the ground transform. Nevertheless, these few empirical observations have failed to translate into nuanced evidence-supported analysis of the causes of PGMs’ end. The goal of this article is to fill the gap in the literature on militia violence through a
rigorous quantitative analysis of the relationship between the end of civil wars and the demise of PGMs.

This study advances the theoretical argument that the end of armed conflict does not necessarily cause the demobilisation of pro-regime militias involved in civil wars. In contrast to other types of armed groups, such as anti-regime rebels, militias disband either before the end of conflict or well after its termination. The central argument rests upon three hypothetical assumptions as to when militias might be expected to demobilise. Firstly, militias are more likely to disband when the war is over if the conflict ends in favour of the incumbent. Secondly, with longer conflict duration, militias are more likely to become burdensome for governments and therefore they have lower chances witnessing the end of conflict in protracted civil wars. Lastly, provided that governments are still interested in militia’s services, they are likely to persist beyond the civil war’s active phase in countries with unresolved conflicts. These assumptions are empirically tested on a sample of 220 pro-government militias involved in 75 civil wars from 1981 to 2011. Descriptive statistics, logit regression and Cox proportional hazards models are employed as the key methods of enquiry.

This article is organised as follows. I begin by reviewing the existing literature on PGMs in civil wars and highlighting the gaps in research. In the following two sections I discuss and theoretically ground three hypotheses that will be tested empirically in further parts of the article. I then present data used in the analysis and describe quantitative methods employed to test the hypotheses. The section on data and methodology is followed by the analysis of empirical findings. The discussion of empirical results is
followed by a concluding section that sums up theoretical and practical implications of this study.

**Pro-government militias in civil wars**

Large-N analyses on militias have only began emerging recently, and, notwithstanding the burgeoning of research on PGMs over the last several years, the role of militias in civil wars has rarely been addressed explicitly. Research to-date has focused on pro-government militias’ role in genocide and civilian targeting, human rights violations, mass killings, and sexual violence. In Kalyvas’s words, militias’ “reputation for atrocity is well established.” A similarly extensive body of literature has been arguing in support of a principal-agent paradigm premised on the argument that governments delegate their monopoly on legitimate violence to militias to avoid accountability. In accordance with the logic of delegation, states “hire” militias to distance themselves from human rights violations and abuses of civilian population and in order to maintain legitimacy in the eyes of international community. Since most PGMs exist outside of regular security structures, subcontracting violence to militias enables governments to avoid implication in war crimes or acts of civilian victimisation.

Existing research has related militias’ violent functions to their relationship with the state. Unlike other violent non-state agents, militias are mobilised, openly or covertly supported by governments, and deployed to perform “dirty jobs” for the state, which means that their relationship with state patrons is not only fundamental for the existence of PGMs, but is also crucial for governments’ ability to maintain their monopoly on
legitimate violence. In other words, governments avoid allocating too much power to militias, and militias avoid challenging the state. Bearing in mind that to various degrees most PGMs exist under the state’s umbrella, legitimation by governments – along with material and legal support – is essential for the PGMs’ survival. When militias become uncontrollable or redundant, or when governments choose to democratise and to transform relationships with their political opponents, militias might be disbanded or merged with regular security forces.

Since militias are first of all agents of violence, their mobilisation almost always coincides with violent conflicts. Carey, Colaresi and Mitchell argued that the emergence of PGMs is irrevocably associated with the potential of disorder or some other threat to government’s authority, such as possibility of coups d’état. For political regimes with weak or potentially unreliable regular armed forces, militias might function as “overlapping security institutions”, offering the regime an extra level of security. Along with functioning as convenient instruments of civilian victimisation, militias are commonly deployed in counterinsurgency (COIN) tasks. The PGMs advantages in COIN are manifold. Not only militias can be used to violently persecute civilian population during insurgencies and other episodes of civil unrest, but also they might be employed to effectively undermine rebel support bases, logistic networks and insurgent supply structures. Unlike conventional COIN forces, which are costly to train and maintain, militias have been described as a “budget option,” requiring minimum investment. Because most PGMs use recruitment patterns similar to rebels, or even tend to enlist rebel deserters and former insurgents, they often share the same recruitment pools and areas of operation with insurgents. Due to such local embeddedness, militias
tend to have much better access to local information and intelligence networks than regular security forces.\textsuperscript{25} It was also observed that, due to the PGMs’ lack of legal status, militia casualties are commonly presented as civilian victims of rebel attacks.\textsuperscript{26} Due to militias’ affiliation with governments and owing to the PGMs’ informal nature, literature on civil wars has thus far tended to ignore the role of militias, as independent actors, in conflict onset, incidence or termination.

This current study contributes to the growing body of literature on pro-government militias by exploring an important but thus far understudied aspect of militia organisations: the end of PGMs activity. Through the set of hypotheses, which will be discussed in following sections, this article aims at improving our understanding of how and when militias meet their end.

**Civil war termination and PGMs**

A good portion of existing research on dissolution of non-state groups involved in armed conflicts either evolves from the literature on demobilisation, disarmament and reintegration (DDR) of rebel organisations,\textsuperscript{27} or derives from the analysis of civil wars’ outcomes.\textsuperscript{28} The end of rebel organisations is closely associated with the outcome of an armed conflict. Studies on civil war commonly identify conflict outcomes in terms of *lose, win* and *draw* (or concession).\textsuperscript{29} The termination of conflict is a decisive period for rebel groups.\textsuperscript{30} Only when the war is over, it becomes obvious whether a rebel group is vanquished as a result of government’s victory, or it emerges as a winner either ousting the incumbent or imposing its conditions on the government.\textsuperscript{31} In both cases, the end of
conflict defines whether rebels cease to exist as an armed group and they either demobilise or merge with conventional armed forces. The draw (or concession) is followed either by the disarmament of rebels and their return to civilian life or by their engagement in formal politics. All three of these outcomes stipulate that rebel organisations rarely survive in their original form and capacity after the end of armed conflict. Hence, the end of rebel groups is closely associated with civil war termination.

Not much is known whether the same equation holds true for pro-government militias. Notwithstanding that the bulk of PGMs brought to life in the midst of civil wars are purposefully designed by governments, once created many militias tend to have a life of their own. Even those militia groups which remain under the state’s control might not be disbanded immediately after the end of conflict. Unlike rebels, PGMs’ interests are commonly aligned with the state’s agenda and even for those militias which choose to retain some distance from the state, cooperation with the government remains decisive. If dissolution of PGMs occurs, it may not qualitatively differ from disintegration of rebel groups. Empirical case studies have shown that when PGMs disband, they follow regular disarmament and reintegration processes. Similarly to rebels, they might also develop into political forces or, provided that the state seeks to make use of their military potential, they become formalised as part of state’s security structures, as was the case with Chechen kadyrovtsy units.

Along with disappearing or undergoing complete transformation, militias also might end up fracturing, declining, or partially transforming, i.e. repurposed as private security. A militia shifting its focus to local profiteering or private security under a different label may still continue to resist rebel forces in some way. For example, the
Philippine Civilian Armed Forces Geographical Units (CAFGU) were deployed against Moro rebels after the NPA threat declined.\textsuperscript{38} As opposed to a specific group being redeployed, state forces were using the same label for different groups in another part of the country. CAFGU in Luzon, northern Mindanao, and southern Mindanao was not the same organisation, but instead the same label placed on the private forces of local bosses seconded to state forces. In terms of disbanding, when a militia moves towards organised crime or local security, it does not necessarily cease anti-rebel activities. Less frequently, PGMs are known to change their status by switching to the rebel side. While the PGM hereby loses its pro-government status, it does not dissolve organisationally. In similar manner, rebel groups that are co-opted by governments transform into pro-government forces.\textsuperscript{39}

The agency of militias should not be downplayed in favour of a state-centric model. As Barter\textsuperscript{40} has suggested, we should not assume that groups resisting rebels are necessarily pro-government. Especially for indigenous militia forces that may resent legacies of state rule as well as the intrusion of rebel forces, or for criminal groups that may undermine state control, this is a flawed assumption. Therefore, it is not only the government’s “decision” to disband militias, but there are also local factors that may lead to the decline of militia forces. Although when governments are winning a conflict, they are more likely to disband militias, in such cases, communities are more likely to disband militias as well. With all of the above in mind, the question as to whether the PGMs’ disintegration is synonymous with termination of armed conflict remains unaddressed.

A cursory examination of empirical case studies hints that it is not uncommon for PGMs to disband well before the end of civil war. The demobilisation of Colombia’s
AUC, reintegration of the Chechen *kadyrovtsy* militia into formal security forces and the dissolution of Spain’s anti-ETA *Grupos Antiterroristas de Liberacion* occurred well before the end of armed conflicts in either of these countries.\textsuperscript{41} These powerful militias were dissolved regardless of the fact that insurgencies, which these PGMs were created to tackle, were still raging.\textsuperscript{42} Other case studies demonstrate that the end of civil war and return to peaceful life, do not immediately lead to dissolution of militias. For example, Serb *Beli Orlovi*, Thai anti-communist “Task Force 80,” as well as Mali’s *Ganda Koy*, have all continued to exist well after the end of civil wars, during which they were conceived. These empirical observations suggest that in spite of PGMs’ intrinsic similarities with rebels, such as similar organisation and recruitment methods, disintegration of militia organisations follows a distinctively different pattern.

All of the above suggests that termination of a civil war is unlikely to result in dissolution of pro-government militias and many militia groups tend to disappear before or well after the end of conflict. The main objective of this study is to examine when and under which conditions PGMs disband or persist in the context of civil wars. The following three hypotheses propose a set of conditions which might influence militia groups’ survival or demobilisation.

**Accounting for variation in PGMs’ demise**

Notwithstanding the PGMs’ perceived or actual independence from the state, militia groups emerging as a response to civil violence might be expected to retain close association with both state-sponsors and the conflict. Decisive victory of the incumbent
resulting in rebel capitulation, such as the victory of the Sri Lankan government over the LTTE, is likely to put an end to civil war and reduce the regime’s resolve to supporting and financing militias. Provided that a militia group was mobilised with the sole purpose of waging counterinsurgency, complete disintegration of its opponents not only undermines the raison d'être of militias, but also weakens their support and recruitment bases. After the demise of rebel organisations, government might choose to either forcibly disband militias, or to incorporate them into its security structures. For instance, following the ousting of Taliban by the Northern Alliance in 2002, militias of many northern warlords were subsequently incorporated into Afghan armed forces.\textsuperscript{43} Even for those PGMs which have emerged as bottom-up community-based self-defence groups, such as Peru’s \textit{Rondas Campesinas}, insurgents’ defeat almost certainly marks the beginning of the end. Both domestic and international pressure on post-conflict countries to ensure disarmament and demobilisation of all pro-government conflict-stakeholders is a robust incentive for the state to disband PGMs.

An entirely different scenario may occur if the victorious side is not government, but rebels. The triumph of rebel forces terminates the incumbent’s rule and transforms the dyad. As soon as the regime falls, PGMs may find themselves in opposition to the new government and they either have to disband or shift sides with rebels, as was the case with the Rwandan \textit{interahamwe} militias after the victory of the Rwandan Patriotic Front (RPF). Soon after the RPF’s ascend to power, \textit{interahamwe} groups transformed from pro-government militias into anti-regime rebels. The impact of conflict termination as a result of (near) absolute victory by either side on militias is overwhelming and might be expected to put an end to the PGMs’ existence. Hence:
**Hypothesis 1.** Pro-government militias are more likely to dissolve the same year as the conflict terminates if civil war ends in decisive victory by either side of dyad.

As detailed above, some PGMs fail to survive long enough to witness their patron’s victory or defeat. The examples of Colombia’s AUC, the Chechen death squads, Turkish anti-PKK village guards, as well as of numerous Sri Lankan anti-LTTE militias (Green Tigers, Black Cats and Yellow Cats) show that even powerful militia groups with a successful counterinsurgency record may meet their end well before the termination of civil war. In the context of civil wars, PGMs not only perform “dirty jobs” for the government, but they are also a liability for the state. Once a PGM is created, or co-opted to pursue state’s interests, state-patrons have to invest heavily in training, supplying and, most of all, ensuring the loyalty of militias. Although maintaining a militia has been described as a “budget” solution to expanding numbers of regular military personnel,\(^4\) purchasing the loyalty of rogue militia leaders can be a costly and risky investment.

Maintaining some sort of control over militias becomes even more challenging as their numbers increase. For example, at the height of their activity, Colombia’s right-wing AUC paramilitaries were active across over 60% of the country. Some of smaller AUC units were not accountable to the government.\(^5\) Regardless of their counterinsurgency functions, PGMs are also notorious for engaging in criminal activities, including but not limited to drug trade, smuggling and kidnapping for ransom. These activities contradict government’s interests and link PGMs with organised crime. In other
cases, militias might spin out of control and start pursuing their own agendas, neglecting and even harming the interests of their patron. The state might also lose interest in maintaining a PGM, if the militia has fulfilled, or failed to fulfill, its function. This is particularly relevant to those militias, which were mobilised to achieve certain short-term goals, such as to commit genocide or mass killings. Disbanding a militia with “bad reputation” can be strategically important for the government in order to improve its image abroad and to show the population and rebels its will to engage in conflict resolution. These and other factors may affect the government-militia symbiosis. The change of government’s “mood” towards militias becomes even more probable in longer civil wars, when governments have more time to become disillusioned with militias. Hence, supporting militias might be a short-term strategy that may reverse over the course of a protracted conflict.

**Hypothesis 2.** Since militias are more likely to be become a burden for governments in long-lasting conflicts, the likelihood of PGMs disbanding before the end of conflict increases with longer civil war duration.

Since the “early” end is just one of the possibilities of what might happen to PGMs created to assist governments in civil wars, militias might as well continue functioning well after the conflict formally ended. While incentives for governments to disband PGMs before the end of civil war are manifold, there might be even more reasons to suspend militia activity once the conflict is over. However, not all conflicts end in a decisive victory by either side. Provided that government succeeds in delivering a heavy
blow to the rebels, but still fails to eradicate the insurgency, the threat of splinter groups or low-attrition conflict would remain. The government’s ability to rely on loyal and efficient militia force in order to wipe out the remnants of resistance might prove essential at that stage of post-conflict transformation. Things become even more complicated if rebels win the confrontation without ousting the regime.

The situation defined as “draw” refers to a condition when rebels succeed in securing concessions from the government, such as opportunity to participate in political processes or territorial autonomy. Bearing in mind that rebels emerge as the side achieving some part (or all) of their goals, the draw is defined here as (incomplete) victory of the rebel side. Although demobilisation and even reintegration of rebel forces may accompany such an outcome, government would hardly be satisfied with the rebels’ victory. Preserving PGMs as a measure of precaution and a safeguard in case if conflict erupts in near future, might seem as a wise decision. Notwithstanding the termination of civil war, PGMs might still be useful in harassing and persecuting former rebels. They can also be deployed against other political opponents of the regime. For example, the Philippines’ CAFGU were created to fight leftist CPP rebels, but were also used against Moro insurgents. It might seem even more important for governments to keep PGMs in cases when no comprehensive agreement on conflict resolution has been achieved. Any form of incomplete conflict settlement, such as ceasefire, serves as a robust incentive for the state to preserve militias. Unlike regular troops, militias are easy to conceal and exclude from disarmament or demobilization agreements.

Even if PGMs have to be demobilised, informal links with government can still be preserved and maintained over long periods. Sierra Leone government’s connections with
Kamajors militia, which were fostered even during periods of peace, is a good example of state retaining informal links with demobilised militias. In times of peace, militias can be employed in non-combat roles, as either community guards or extra-state security forces. Government could be particularly willing to keep PGMs if the conflict was short and ended in stalemate. Provided that conflict’s duration did not span across decades, the chance that militias would spin out of control and become rogue is lower than in long-lasting civil wars. Thus:

**Hypothesis 3.** Governments may decide to preserve militias, if they fail to settle conflicts in their favour, and therefore militias tend to survive longer in context of unresolved conflicts.

**Methodology**

The above hypotheses are tested using a sample of 220 pro-government militias in 75 civil wars. The data set on militias was compiled from the Pro-Government Militia Database (PGMD) that identifies 332 PGMs active from 1981 to 2007. The PGMD consists of all pro-government militias active during the above period, including groups which never participated in civil wars. The data on the PGM involvement in civil wars from 1981 to 2011 was adopted from Stanton. Since the PGMD offers information about the presence/absence or the inactivity/activity status of militia groups, only active PGMs were included in the data set. For civil war data, I used the Uppsala Conflict Data Program (UCDP)/Peace Research Institute Oslo (PRIO) Armed Conflict Dataset (ACD)
v.4-2015. A standard definition of civil war as a conflict with at least 1,000 battle-related deaths\textsuperscript{50} has been employed to select conflicts with militia involvement. A total of 75 civil wars were identified as conflicts with the presence of pro-government militias. Only 16 conflicts were ongoing. While each civil war included in the sample had at least one PGM, over 30\% of civil wars had multiple militia groups involved. Among PGMs involved in active conflicts, only 15 militia groups were found active.

*Dependent variables*

The dependent variable of this study is the termination of PGM activity. The original PGMD data on the end of militia activity was combined with the UCDP Conflict Termination Dataset v.-2010\textsuperscript{51} in order to produce a cross-sectional data set with pro-government militia groups as the unit of analysis. Civil war termination is measured by the precise date when each conflict ended, as estimated by the UCDP. The dissolution of PGMs is measured as the exact date when each militia group disbanded, or in the absence of such data, as last recorded activity. The end of PGMs is tested on three dichotomous dummy variables: (1) correlation, (2) PGMs end before the conflict’s termination, and (3) PGMs disband after the end of civil war. For H1, which examines the correlation between the end of PGM activity and civil war termination, the number of observations was reduced to 138. A PGM is coded as disbanded the same year as conflict ends if it ceases its activity and/or dissolves within a 12-month period after the end of civil war. For H2, a militia group was coded as 1 if it was inactive before conflict termination and as 0 for all active militia groups. Each PGM was identified as dissolved before the end of civil war if
it was disbanded (ceased its activity) at least 12 months before the termination of conflict. A similar coding procedure was applied towards those PGMs which continued to function after the end of civil war (1=active; 0=other): PGMs dissolved later than 12 months after the end of civil war are presented as active after the conflict termination. To address the problem of endogeneity, only PGMs created a year before the start of civil conflict were included in the sample. In other words, militia groups mobilised well before the onset of conflict, but deployed against the rebels with the start of conflict violence, might be expected to continue functioning even after the end of conflict. To account for variation in the typology of PGMs, I borrowed data on informal and semi-official militias from Carey et al. (2013).\textsuperscript{52} According to the authors,\textsuperscript{53} the difference between these two types of PGMs is the degree of their affiliation to the state.

\textit{Independent variables}

To test each of these hypotheses, a number of explanatory variables were introduced. Firstly, the data on victory side is borrowed from the UCDP conflict termination data set. The variable provides information whether victorious side in each terminated civil war was government or rebels. Conflict duration is a count of conflict years. The data on conflict incompatibility was taken from the UCDP/PRIØ Armed Conflict data set and it distinguishes between incompatibility over government and over territory. Conflict intensity is a dummy variable that measures cumulative intensity of conflict, based on the data from the UCDP/PRIØ data set. Following the UCDP’s terminology, a civil war is coded as “low-intensity conflict” if the conflict has not exceeded 1,000 battle-related
deaths since its onset and as a “major war” if a 1,000 deaths threshold was reached. This study controls for conflict intensity only for the year when a PGM ceases to exist. The data on civil war outcome is also taken from the UCDP conflict termination data set. It is a factor variable, which measures four possible outcomes of conflict: peace agreement, ceasefire with conflict resolution, ceasefire, victory, and low activity.

**Control variables**

Which other factors might be expected to affect PGMs’ demise? Studies on insurgency termination and civil war duration converge on the argument that democracy, ethnicity, religion, terrain, economic and human development have an impact on the outcome of civil war.\(^5^4\) To measure the impact of regime type, I use Polity IV data set. Variables on religious fractionalisation and ethnic exclusion (percentages of population), as well as the measure on the percentage of mountainous terrain, are taken from Fearon and Laitin.\(^5^5\) Another variable added from Fearon and Laitin’s data set is a dummy on whether a civil war is an ethnic conflict. A log of real GDP per capita is taken from the World Bank database. The data on human development is from the State Fragility Index and Matrix 2014 (SFIM) provided by the Centre for Systemic Peace.\(^5^6\)

To test the hypotheses, several statistical methods are employed. Firstly, the hypotheses are tested using descriptive statistics to analyse the data set. Since each of three outcome variables is bivariate, cross-tabulating the data shows how many PGMs disappear before, after and simultaneously with the end of conflict. Secondly, the hypotheses are tested through logit regression models, designed to control for each
outcome variable. The results of logit regression are then checked for robustness using Cox proportional hazards estimates. A semi-parametric method was chosen because the data contains censored observations, which may not be captured well by parametric or nonparametric models. Besides, the end of PGMs is a transition which may or may not occur at a certain point of time. A PGM remains in the event (risk) set while it is active; it enters the failure set once (and when) the group is dissolved and it disappears from the risk set if the group does not disband during the observed period.

**Empirical analysis**

To start with, the hypotheses are tested using descriptive statistics. The cross-tabulation analysis presented in Table 1 offers support to the key argument of this study: only 8% of all PGMs were disbanded in the same year as civil wars ended in their respective countries. A greater number of PGMs (40%) ended their activity at various periods before the termination of conflict. Almost one third of militias continued functioning after the end of civil wars. This number includes PGMs currently active in countries where civil wars ended.

**Table 1.** Correlation between PGM end and civil war termination

There appears to be little correlation between the termination of civil wars and dissolution of pro-government militias during the observed period. Instead, as shown in Figure 1, the highest number of civil wars’ termination occurred in a period between
1995 and 1997, when the end of numerous conflicts of post-communist region coincided with the termination of a number of civil wars in Sub-Saharan Africa. The bulk of PGMs conceived during these conflicts continued functioning for almost another decade when the fourth wave of democratisation in Central Eastern Europe brought an end to PGMs in many transitioning countries, such as the Balkan states and Georgia.

**Figure 1.** Time-series correlation between civil war termination and dissolution of PGMs

Table 2 presents the results from three logit regression models. Models 1 and 3 include all explanatory variables and controls. Model 2 is designed similarly with the exception of conflict outcome variable, which is omitted because the conflict outcome is not likely to influence the dissolution of PGMs before the end of civil war. The Akaike’s information criterion (AIC) was calculated for each model; it shows that the best model fit had been achieved in Model 1. Calculating margins in Model 1 provides further support for the key argument: the probability of PGMs disbanding the same year as the conflict ends is only three percent. The likelihood of PGMs disappearing before the end of conflict increases to 23%, while the probability of militias ending their activity after the termination of civil wars is at around 16%.

**Table 2.** Logit regression estimates of PGMs and civil war termination

The results for Model 1, which explores why PGMs cease to exist the same year as the conflict ends, do not support Hypothesis 1. The coefficients for either incumbent or
rebels victory are statistically insignificant and rather low (negative for government) for both types of conflict termination. Similarly, the specific types of conflict outcomes offer no conclusive results. Although ceasefire with conflict resolution has strong positive relationship with the dissolution of PGMs in the same year as the end of conflict, it has no statistical significance. Hence, the conflict outcome is unlikely to offer a reliable explanation as to why PGMs disintegrate the year when the conflict ends.

There is, however, a degree of negative correspondence between the PGM end and conflict duration, which suggests that PGMs are not likely to disband immediately after the end of civil war in protracted conflicts. A cursory examination of cases when the end of PGMs activity coincided with civil war termination, shows that only 21% of PGMs involved in protracted conflicts were disbanded the same year as the conflict ended, whereas the rest of PGMs’ end cases (79%) occurred in conflicts lasting less than a decade. With the exception of ethnic exclusion that remains in negative direction, control variables for Model 1 are not statistically significant.

Second hypothesis predicts that PGMs disband before civil war end in protracted conflicts. The findings of the statistical analyses lend support to this assumption. In Model 2, the end of PGM activity is associated with conflict duration. The coefficient for conflict duration is positive and statistically significant at .001 level, indicating that PGMs indeed disintegrate faster in protracted conflicts. The early end of PGM activity also has strong positive relationship with conflict intensity. More specifically, it shows that major civil war has high statistically significant probability of inducing the PGMs’ termination. This is an interesting finding; as high conflict intensity might be assumed to increase the government’s demand for PGMs’ services. One probable explanation might
be in the government’s loss of control over the escalation of violence. Indeed, a number of PGMs disbanded well before the end of conflict, such as Angola’s Vigilante Brigades, Colombia’s AUC and the “Soldiers from my Town,” Philippines’ Tadtads, and Sri Lankan “The Eagles of the Highlands,” ceased to exist precisely when numbers of conflict-related deaths were increasing. A closer look at the data shows that almost one third (30%) of PGMs disbanded before the end of civil wars were terminated in the midst of large-scale warfare with numbers of battle-related deaths per year reaching over 1,000. However, searching for explanations whether the PGM involvement leads to higher rates of conflict-associated violence is beyond the scope of this study.

The variable on victory side was included in this model for its predictive value. Bearing in mind that some PGMs ceased to exist just one or two years before conflict termination, accounting for conflict winner may offer some explanation as to why these PGMs perished. The association between rebel victory and the PGMs’ early end is both statistically significant and negative, pointing out that PGMs are not likely to disband early in those conflicts which would end in rebel victory. Only 27% of all PGMs disbanded before the end of conflict were involved in civil wars ending in rebels’ victory. By contrast, almost half of PGMs dissolved before the end of civil wars were engaged in conflicts won by the government. This finding offers some explanation with regard to the association between the early end of PGMs and conflict intensity. In other words, as governments are closer to winning the war they are likely to become less reliant on militias and more inclined to disband them. It also provides additional explanation for the above mentioned finding on the relationship between the increase of battle-related deaths
and dissolution of militias: the increase of conflict-associated violence may be related not only to the government’s loss of control, but also to its success in routing out rebels.

In case if incumbent is successful in inflicting a high number of casualties on rebels, it may seek to strengthen its monopoly over the use of violence at the expense of non-state actors. While data on the ratio of government vs. rebel casualties do not exist for all cases in the data set, the above assumption still lends some support for H2. In other words, as found by Fearon, longer civil wars are commonly fought over land issues (“sons of the soil” rebellions) and they tend to be of low intensity and low casualty rate. These conflicts, however, are characterised by occasional eruptions of violence, such as during the last phase of Sri Lankan civil war. It is during these periods of increased violence that governments may decide to dissolve militias either due to fears of losing control over conflict escalation, or in order to monopolise its control over the use of violence. For example, Colombian government’s efforts to disband AUC paramilitaries coincided both with the rise of conflict-related violence and with the government’s increased attempts to take full control over the monopoly of violence.

In terms of controls, mountainous terrain and ethnic conflict are statistically significant and positive, hinting that PGMs are less likely to survive until the end of conflict in ethnic civil wars fought on rough terrain. Fearon and Laitin hypothesised that ethnic rebellions, many of which are fought in remote areas with harsh terrain, tend to last longer and are harder for incumbents to defeat. PGMs might be mobilised in such conflicts in hope of weakening the rebels but as prospects of fast victory decrease, governments become more willing to disband militias. Lastly, higher GDP per capita has
strong association with the PGMs’ early end, showing that militias in more economically developed countries meet their end earlier.

The last hypothesis posits that PGMs survive beyond the end of civil war if civil war remains unresolved. Model 3 tests this hypothesis and only partially lends support to these arguments. The analysis of findings for conflict outcome variable reveals that there is a strong association between victory (by either side) and PGMs’ persistence beyond the end of conflict. A weaker, but positive, degree of association could be observed between the PGM survival and conflicts ending either in peace agreement (without conflict resolution) or in a low-attrition conflict. Rebel victory has positive but low and statistically insignificant relationship with PGMs survival, while government victory is in negative direction. The analysis of data set reveals that over half of PGMs survived in countries which experienced conflicts won by rebels.

These findings indicate that conflicts culminating in ceasefire or low-level insurgency, are likely to lead to PGMs survival after civil wars end. This confirms that governments may choose to preserve militias in order to re-deploy them in case if the dormant conflict escalates. One notable example of government preserving militias in the aftermath of an unresolved conflict is the recent conflict between Ukrainian government and Russian-backed separatists in Eastern Ukraine. As the conflict was put on hold by a ceasefire agreement, the government continues to maintain militia battalions, some of which only formally were incorporated in regular army. There might be other reasons why governments decide to continue maintaining a militia force, such as deploying militias as a coup deterrent. This assumption is consistent with findings by Carey et al. that coup prevention is an important function of PGMs. In addition, these findings
indicate that governments are keen to preserve PGMs as a “precaution measure” even after the end of conflict, and not only before and during the conflict.

Model 3 produced two more significant and noteworthy findings. Firstly, as expected conflict incompatibility is strongly associated with PGM persistence. The analysis of data reveals that difference between incompatibility over government and over territory in conflicts which resulted in PGMs’ survival is insignificant: 32 conflicts were fought over government and 36 over territory. This finding suggests that it is not the category of incompatibility that accounts for the persistence of PGMs but the fact that the conflict incompatibility remained unaddressed. This finding bolsters the claim that unresolved conflicts are more likely to witness the continuity of militia activity.

Secondly, there is a robust statistically significant relationship between PGMs’ survival and low-intensity conflict, demonstrating that militias have more chances to continue operating in countries, which experience low-intensity civil war. A closer look at these cases shows that, 89% of all surviving PGMs in post-conflict countries were involved in low-intensity conflicts. As low intensity civil wars tend to last longer and often end in rebels’ securing some sort of concession from the government, it explains the governments’ tendency to preserve militias even after the end of active (combat) phase of civil war.

Amongst controls, in contrast to Model 2, both mountainous terrain and ethnic conflict are in negative direction. Bearing in mind that conflict duration is below 0 and insignificant, this observation indicates that PGMs are more likely to survive after the conflict in countries where civil wars were short, not ethnically motivated and possibly fought conventionally or semi-conventionally. Typical examples of such conflicts are
coup, or confrontations between rival political factions, similar to Sierra Leone’s and Congolese civil wars, or Haiti’s and Ghana’s military coups. Unlike the “sons of the soil” rebellions or similar long-lasting ethnic conflicts, shorter and more conventionally fought civil wars take place in urban centres rather than in mountains. As ethnic fractionalisation variable remains strong and significant, ethnically diverse societies are likely to experience the persistence of militias. Even if the recent conflict was not about ethnic incompatibility, the degree of ethnic fractionalisation in the country may explain the incumbent’s decision to preserve PGMs in case if ethnic tensions develop. For example, similarly to the Philippines’ CAFGU – deployed against both ethnic and non-ethnic insurgents – Israeli Village Guards and Settlers militias were used in conflicts with both nationalist and Islamist Palestinian militants. Hence, ethnic diversity even in the absence of ethnic conflict offers an incentive to preserve PGMs.

I have also tested the effects of two sub-categories of PGMs – informal and semi-official PGMs on each statistical model. Due to a small sample, the semi-official category produced no results. Informal PGMs remained insignificant and hardly above 0 in all three models. Since the presence of these two variables had no effect on either model fit or on the results, they were excluded from the analysis.

Robustness check

To assess the robustness of these results the three models were tested using Cox proportional hazards estimates. The findings of the survival analysis are presented in Table 3. The model specifications are the same as in Table 2. Similarly to logit findings,
duration is statistically significant in Model 1. Hazard ratio for duration is below 1, suggesting that the risk of PGMs disbanding the same year as conflict ends is fairly low in longer conflicts. This can be equated to findings in Table 2. The only other finding of Model 1 that corresponds to logit results pertains to ethnic exclusion, which remains in negative direction in both analyses. In contrast to logit model, Model 1 in Table 4 produced strong and statistically significant effects for variations of conflict outcome. In line with H1, the model reports that the risk of PGMs’ end increases by 587% if conflict terminates in victory. The result for peace agreement is even higher (at 676%). These results suggest that both peace agreement and victory increase the risk of PGMs’ dissolving once the conflict is over. As both of these outcomes result in almost certain end of the conflict – unlike different types of ceasefire agreements – these finding lends support to H1 that expected absolute victory by either side to lead to militia disappearance.

**Table 3.** Cox proportional hazards estimates of PGMs and civil war termination

Model 2 offers support to H2 and produces results somewhat corresponding to logit regression models. The risk of PGMs ending their activity before the end of civil war is 40% in longer conflicts. Rebel victory is another statistically significant variable in that model, and just as in Table 3 it is in negative direction. The model shows positive hazard ratio for major civil war, but the result has no statistical significance. In addition, these findings were estimated by parametric models (Weibull), which yielded similar results and therefore are not shown.
Conclusion

The existing literature on pro-government militias has thus far offered few explanations with regard to when and why militias deployed to fight civil wars cease to exist. This article conducted a nuanced statistical analysis of the process of militia dissolution and of factors affecting that process. The findings demonstrate that there is little correlation between civil war termination and the end of militia activity. While only a small number of PGMs disband immediately in the aftermath of conflict termination, far greater numbers of militias cease to exist before the end civil war, or continue operating well after the end of conflict. Although mobilised at various stages of armed conflicts, pro-government militias show a tendency of disintegrating prior to the end of conflict. They also show a strong propensity to over live civil wars. It was hypothesised in this study that the end of PGM activity can be explained by such factors as conflict duration, outcome, and intensity. The findings indicate that each of these variables helps to explain either the end or endurance of pro-government militias in (post) civil war environments.

As most cases of correlation between the PGMs’ end and the termination of civil war occurred in shorter conflicts, conflict duration helps to understand in which type of civil wars militias might be expected to dissolve immediately after the end of conflict. Duration is similarly important to explain the early disappearance of PGMs, because higher numbers of militia groups tend to dissolve before the end of civil war in long-lasting conflicts. This shows that those PGMs which succeed in surviving after the end of conflict are more likely to do so in shorter civil wars. The results of statistical tests reveal
that conflict outcome has decisive impact on both end and persistence of PGMs. Thus far few militias were disbanded in conflicts ending in rebels’ securing concessions from the government. Hence, a strong relationship between the survival of militias and the rebel victory, particularly in shorter civil wars, hints that state’s failure to terminate the conflict in its favour serves as a robust incentive for incumbents to continue supporting PGMs. PGMs also seem to have less chances to survive large-scale civil wars characterised by high levels of conflict-associated violence. By contrast, most of surviving after the conflict’s termination militias were involved in low-intensity civil wars. Conflict incompatibility seems to be of little significance either for the correlation between disintegration of PGMs and the wars’ end or for militias’ pre-conflict end dissolution. Nonetheless the failure to resolve conflict incompatibility emerges as an incentive for incumbents to preserve militias after the end of conflict.

Bearing in mind the explanatory weight of the above variables, it is possible to outline two scenarios conducive to PGMs termination, or the lack thereof. Firstly, major civil wars with high numbers of battle-related deaths, that last less than a decade and culminate in a decisive victory by either side of the dyad, and often followed by an effective conflict resolution, tend to witness the highest number of PGMs disbanded. Secondly, short, less intensive and inconclusive civil wars encourage the endurance of militias. Unresolved disagreements amongst the belligerents and unsatisfied with the conflict outcome governments are potentially conducive towards the PGMs’ survival. These findings nonetheless offer only partial explanation about the termination of militia activity in protracted low-intensity conflicts, termed in the literature as “the sons of the soil” rebellions. This can be explained by the fact that many of such conflicts are still
ongoing. For example, Mexico’s conflict with the EZLN rebels, Myanmar’s confrontation with Kachin and Karen rebels, as well as Mali’s long-lasting troubles with Tuareg insurgents, have been accompanied by both the persistence and disintegration of militia groups which emerged in the course of these protracted low-attrition conflicts. In other words, once some militia groups involved in the “sons of the soil” wars disappear, others emerge. However, further research is needed in order to explain the dynamics of emergence and disappearance of PGMs in protracted low-intensity civil wars.

This study contributes to the growing field of research on pro-government militias by offering a number of important implications for theory and practice. Keeping in mind that the research on PGMs remains in its infancy, the current study demonstrates that, unlike termination of rebel organisations, PGMs’ end is weakly associated with the end of civil war. Militias’ endurance is conditioned by such factors as conflict duration, outcome, and intensity. These variables are not only associated with militias’ demise prior to the end of armed conflict, but also provide some explanatory insights into the PGMs’ post-conflict continuity. As violent non-state actors engaged in civil wars, militias might prove resilient to changes and can continue functioning in post-conflict environments. Future research could explore the factors accounting for the demise of those PGMs, which outlived civil wars. Lastly, this study has demonstrated that there is an observable pattern in disappearance of PGMs, which correlates with the type of conflict. This may enable both researchers and practitioners to improve their understanding of the PGMs’ role in armed conflicts.

Notes


This study employs the definition of pro-government militias coined by Carey et al. (2013). It describes PGMs as groups which are either identified as supporting government or are sponsored by the state. In order to be defined as militias, these groups should not be a part of regular armed forces, they have to be armed and they should maintain some form of organisation. See Sabine C. Carey, Neil J. Mitchell, and Will Lowe, “States, the security sector, and the monopoly of violence: A new database on pro-government militias,” *Journal of Peace Research* 50 (2013), pp. 249-258, p. 250.


13 Carey et al., “States, the security sector”; Staniland, “Militias, Ideology, and the State.”


15 Carey et al., “States, the security sector.”

17 Staniland, “Militias, Ideology, and the State.”

18 Carey et al., “Governments, Informal Links to Militias, and Accountability.”

19 Ibid, p.3.

20 Stanton, “Regulating Militias Governments.”


24 Lyall, “Are coethnics more effective.”


33 Lyall and Wilson, “Rage against the machines,” p. 71.


36 Mazzei, *Death squads or self-defense forces*, pp. 122-123.


44 Peic, “Civilian defense forces, state capacity,” p. 166.

45 Mazzei, *Death squads or self-defense forces*, pp. 118-119.
It might also be hypothesised that weaker militias will be easier for the state to disband, and that if conflicts are low-intensity, they will be more likely to fade. A more powerful militia group is more likely to endure. However, due to the absence of reliable data on militia capacity, these factors are missing from the article’s discussion and therefore warrant attention in future research.


Carey et al., “States, the security sector, and the monopoly of violence.”

Stanton, “Regulating Militias Governments.”


Carey et al., “States, the security sector, and the monopoly of violence.”

Ibid., p. 251.


Fearon and Laitin, “Ethnicity, insurgency, and civil war.”
The SFIM measures Human Development Index (HDI) on a four-point fragility scale with 3 for the lowest level of human development and 0 for highest. Stable url at: http://www.systemicpeace.org/inscrdata.html.


Ibid., p. 288.

Fearon and Laitin, “Ethnicity, insurgency, and civil war.”


Incompatibility was tested in logit regression as a non-categorical variable, but two categories of incompatibility (over government and territory) were added to check the robustness of test results on incompatibility. These categories are not included in Models presented in Table 2.

The models report hazard ratios and z-statistics. I have also estimated coefficients for the same models, but the results and significance did not differ from hazard ratios and therefore are not reported here.