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To cite this article: Corinne Bara & Joakim Kreutz (2022) To Buy a War but Sell the Peace? Mercenaries and Post-Civil War Stability, *Security Studies*, 31:3, 417-445, DOI: [10.1080/09636412.2022.2097890](https://doi.org/10.1080/09636412.2022.2097890)

To link to this article: <https://doi.org/10.1080/09636412.2022.2097890>



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Published online: 12 Jul 2022.



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## To Buy a War but Sell the Peace? Mercenaries and Post-Civil War Stability

Corinne Bara and Joakim Kreutz

### ABSTRACT

Private military and security companies (PMSCs) and mercenaries are a common feature in civil wars, yet little systematic analysis of PMSC involvement and conflict dynamics exists. This article explores whether civil conflicts that feature PMSC forces in combat are more likely to recur. We contend that the presence of PMSCs in fighting exacerbates the postwar credible commitment problem, as belligerents will be concerned about the possibility to redeploy such forces in the future. Belligerents pay more attention to more recent and more visible information, meaning that the effects should be greatest if PMSCs feature extensively in combat and at the end of the conflict. A duration analysis of data from the Private Security Events Database and Uppsala Conflict Data Program, 1990–2014, offers robust support for these claims. Our results suggest that conflict management should consider aspects beyond the local context as risk factors for civil war recurrence.

What are the long-term consequences of the use of private military and security companies (PMSCs) and mercenaries in civil wars? The deployment of private contractors as fighters in Afghanistan, Iraq, Syria, Ukraine, the Central African Republic, Nigeria, and beyond has a profound impact on the contemporary international security landscape,<sup>1</sup> but we know little about the long-term effects of PMSCs on postwar stability. In related research, there is a growing recognition that conflicts contested by multiple actors—whether different rebel groups, external state interveners, or

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<sup>1</sup>Anna Leander, "The Market for Force and Public Security: The Destabilizing Consequences of Private Military Companies," *Journal of Peace Research* 42, no. 5 (September 2005): 605–22; Seden Akcinaroglu and Elizabeth Radziszewski, "Private Military Companies, Opportunities, and Termination of Civil Wars in Africa," *Journal of Conflict Resolution* 57, no. 5 (October 2013): 795–821; Ulrich Petersohn, "Private Military and Security Companies (PMSCs), Military Effectiveness, and Conflict Severity in Weak States, 1990–2007," *Journal of Conflict Resolution* 61, no. 5 (May 2017): 1046–72; Christopher M. Faulkner, "Buying Peace? Civil War Peace Duration and Private Military & Security Companies," *Civil Wars* 21, no. 1 (March 2019): 83–103; Benjamin Tkach, "Private Military and Security Companies, Corporate Structure, and Levels of Violence in Iraq," *International Interactions* 46, no. 4 (2020): 499–525.

militias—may produce a more complex postwar society where recurrence is more likely.<sup>2</sup> In this article, we expand this literature to move beyond actors that fight for political or ideological purposes to PMSCs that have joined a war on a purely commercial basis. Does the use of such actors have a similar negative effect on the subsequent peace duration?

Societies emerging from civil war face numerous challenges, including the need to rebuild institutions, infrastructure, and the economy while demobilizing combatants, reestablishing law and order, and supporting reconciliation and reparation efforts.<sup>3</sup> Unlike at the end of international wars, after which armies withdraw into separate countries, former civil war belligerents have to coexist in society, which increases the risk that provocations or misunderstandings escalate to the recurrence of conflict.<sup>4</sup> As demobilization shifts the interparty balance of power, scholars have argued that the greatest challenge for postwar stability is managing the existing distrust between former warring parties, and the difficulties for them to credibly commit to refrain from future violence.<sup>5</sup>

We argue that when PMSCs have participated in the preceding war, this credible commitment problem is exacerbated, leading to a greater risk of civil war resumption. Though the actual PMSC forces may withdraw as their contract ends, the legacy of their use will accentuate uncertainty in the postwar society. This is due to two types of information that determine the lingering uncertainty between former belligerents about their respective true intention: first, the information battles provide during the preceding conflict, and second, the postwar behavior that can be monitored and verified. The most viable long-term solution to the credible commitment problem is the establishment of predictable interparty relations, based on repeated interactions that display a willingness to cooperate and implement peace provisions.<sup>6</sup> However, we suggest that the use of PMSCs has a negative effect on this process. If one—or both—warring sides have used

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<sup>2</sup>Sean M. Zeigler, "Competitive Alliances and Civil War Recurrence," *International Studies Quarterly* 60, no. 1 (March 2016): 24–37; Niklas Karlén, "The Legacy of Foreign Patrons: External State Support and Conflict Recurrence," *Journal of Peace Research* 54, no. 4 (July 2017): 499–512; Christoph V. Steinert, Janina I. Steinert, and Sabine C. Carey, "Spoilers of Peace: Pro-Government Militias as Risk Factors for Conflict Recurrence," *Journal of Peace Research* 56, no. 2 (March 2019): 249–63.

<sup>3</sup>Barbara F. Walter, "Does Conflict Beget Conflict? Explaining Recurring Civil War," *Journal of Peace Research* 41, no. 3 (May 2004): 371–88; Paul Collier, Anke Hoefler, and Måns Söderbom, "Post-Conflict Risks," *Journal of Peace Research* 45, no. 4 (July 2008): 461–78.

<sup>4</sup>Michael J. Boyle, *Violence after War: Explaining Instability in Post-Conflict States* (Baltimore: Johns Hopkins University Press, 2014); Corinne Bara, Annekatrin Deglow, and Sebastian van Baalen, "Civil War Recurrence and Postwar Violence: Toward an Integrated Research Agenda," *European Journal of International Relations* 27, no. 3 (September 2021): 913–35.

<sup>5</sup>Barbara F. Walter, *Committing to Peace: The Successful Settlement of Civil Wars* (Princeton, NJ: Princeton University Press, 2002); Suzanne Werner and Amy Yuen, "Making and Keeping Peace," *International Organization* 59, no. 2 (Spring 2005): 261–92; Caroline A. Hartzell and Matthew Hoddie, *Crafting Peace: Power-Sharing Institutions and the Negotiated Settlement of Civil Wars* (University Park: Pennsylvania State University Press, 2007).

<sup>6</sup>Robert Axelrod, *The Evolution of Cooperation* (New York: Basic Books, 1984); Charles Tilly, *Trust and Rule* (New York: Cambridge University Press, 2005).

PMSCs as part of their fighting force, then information from the conflict suggests that a renewed deployment of PMSCs in the postwar period is a potential risk. In addition—and why this suspicion is particularly pernicious—these concerns cannot be addressed after the end of fighting by the type of effort commonly imposed to facilitate postwar information sharing. Since PMSCs are excluded from public demobilization or disarmament processes, uncertainty remains regardless of attempts to promote local confidence-building or the presence of international peacekeepers and monitors.<sup>7</sup> Warring sides remain aware that the potential of PMSC deployment exists—as such forces participated in the preceding fighting—but it is impossible to monitor these highly capable forces before they are hired.<sup>8</sup> Consequently, this exacerbated credible commitment problem increases the risk of civil war recurrence.

Consider the case of Sierra Leone, where the regime contracted the South African security company Executive Outcomes in early 1995 to stop the advance of the four-thousand-strong Revolutionary United Front (RUF).<sup>9</sup> The PMSC's deployment substantively affected battlefield performances, as the government quickly recaptured lost territory—including lucrative diamond areas—and forced the RUF to accept a peace deal in November 1996.<sup>10</sup> Executive Outcomes left the country just a few months later. However, the legacy of the active participation of a PMSC in government fighting leading up to the agreement contributed to uncertainty between the former warring parties in several ways. First, RUF remnants lacked information about the government forces' true military capabilities and potentially saw an opportunity for winning after the withdrawal of the PMSC.<sup>11</sup> Second, the leadership of the Sierra Leonean armed forces perceived a threat from the local Kamajor militias that Executive Outcomes had trained and equipped and had used in many PMSC-led armed operations.<sup>12</sup> Both aspects combined to create a volatile setting where RUF fighters were able to collude with parts of the army to resume the war in May 1997.

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<sup>7</sup>Virginia Page Fortna, "Does Peacekeeping Keep Peace? International Intervention and the Duration of Peace after Civil War," *International Studies Quarterly* 48, no. 2 (June 2004): 269–92.

<sup>8</sup>Xavier Renou, "Private Military Companies against Development," *Oxford Development Studies* 33, no. 1 (2005): 107–15.

<sup>9</sup>Scott Fitzsimmons, "When Few Stood against Many: Explaining Executive Outcomes' Victory in the Sierra Leonean Civil War," *Defence Studies* 13, no. 2 (2003): 245–69.

<sup>10</sup>Herbert M. Howe, "Private Security Forces and African Stability: The Case of Executive Outcomes," *Journal of Modern African Studies* 36, no. 2 (June 1998): 307–31; P. W. Singer, *Corporate Warriors: The Rise of the Privatized Military Industry* (Ithaca, NY: Cornell University Press, 2003). Note that this case is not included in our statistical analyses since there was not a full calendar year of peace between the end of conflict in November 1996 and its resumption in May 1997.

<sup>11</sup>Faulkner, "Buying Peace?"

<sup>12</sup>A. B. Zack-Williams, "Kamajors, 'Sobel' & the Militariat: Civil Society & the Return of the Military in Sierra Leonean Politics," *Review of African Political Economy* 24, no. 73 (September 1997): 373–380.

To explore whether credible commitment is more difficult after conflicts with PMSC involvement, our analysis compares the duration of peace between cases with PMSC involvement and cases without. We begin with a brief review of the literature on PMSCs and civil conflict before situating our theoretical argument within the literature on civil war recurrence. We elaborate on how predictable interactions are central for overcoming the lack of interparty trust, and why the use of PMSCs for combat exacerbates the credible commitment problem. From this discussion, we derive testable implications from a generally increased risk of civil war recurrence to more specific predictions relating to the effects from the visibility and temporality of the PMSC involvement. We then describe our research design and data. Our empirical material combines information on post-civil conflict episodes between 1990 and 2014 from the UCDP/PRIO Armed Conflict Dataset<sup>13</sup> with information on PMSC activities sourced from the Private Security Events Database (PSED).<sup>14</sup> Following a series of Cox regression analyses, including on a subsample identified by coarsened exact matching (CEM), our analysis suggests that the risk of conflict recurrence after conflicts with PMSCs in combat is 64 percent higher than where no such forces had deployed. More specifically, we find that the disruptive effect of PMSCs is greatest if they have participated in more combat events, and particularly if they have during the final year of conflict. In line with the theoretical expectations about how warring parties source information from battlefield experience and prioritize more recent information, we interpret this as indicative for how PMSC deployment exacerbates the postwar credible commitment problem.

### What Is Known about “Guns for Hire” and Civil War?

PMSCs are hired by a multitude of actors (states, international organizations, nongovernmental organizations (NGOs), companies, wealthy individuals, etc.); are active in a variety of contexts (war and peace, at home and abroad); and provide a broad spectrum of services (site protection, logistics, training to military or police, combat, etc.).<sup>15</sup> Mercenaries have been a common feature of civil wars, but with a “private security boom”<sup>16</sup> starting in the 1990s, the participation of commercial actors in others’ civil wars

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<sup>13</sup>Nils Petter Gleditsch, Peter Wallensteen, Mikael Eriksson, Margareta Sollenberg, and Håvard Strand, “Armed Conflict 1946–2001: A New Dataset,” *Journal of Peace Research* 39, no. 5 (September 2002): 615–37; Therése Pettersson, “Organized Violence 1989–2020, with a Special Emphasis on Syria,” *Journal of Peace Research* 58, no. 4 (July 2021): 809–25.

<sup>14</sup>Deborah Avant and Kara Kingma Neu, “The Private Security Events Database,” *Journal of Conflict Resolution* 63, no. 8 (September 2019): 1986–2006.

<sup>15</sup>Singer, *Corporate Warriors*; Deborah D. Avant, *The Market for Force: The Consequences of Privatizing Security* (Cambridge: Cambridge University Press, 2005); Christopher Kinsey, *Corporate Soldiers and International Security: The Rise of Private Military Companies* (London: Routledge, 2006).

<sup>16</sup>Avant, *Market for Force*, 2.

has turned into a burgeoning market for force.<sup>17</sup> Indeed, an influential article by Doug Brooks, founder of the association representing the private military industry's biggest players, argued for the benefits of using PMSCs for peacekeeping with the now-famous title "write a cheque, end a war."<sup>18</sup>

Yet only recently have scholars started systematic analyses of how PMSC involvement influences conflict dynamics.<sup>19</sup> A recent study finds a slightly increased risk of civil war onset in countries with a PMSC presence and suggests that commercial entities are "providing multiple actors with access to the means of violence, which in turn has increased the likelihood of the use of force to resolve conflicts."<sup>20</sup> This is in line with earlier findings about how PMSCs increase the severity of conflict by enhancing their clients' military effectiveness, though the effect is somewhat conditioned on the type of services offered and the companies' performance.<sup>21</sup> Commercial actors are often used in settings where they are better trained and equipped than local recruits, meaning a relatively small PMSC force can have a substantial impact.<sup>22</sup> Often-quoted examples include the impact of the South African company Executive Outcomes in Angola in 1993 and Sierra Leone in 1995,<sup>23</sup> which helped the respective governments repel advancing rebels, even if the subsequent peace was brief in both cases. A criticism directed toward the use of PMSCs is the lack of clarity regarding such forces' legal status as combatants and the lack of legal and institutional constraints on their mandate and activities.<sup>24</sup> Consequently, the deployment of PMSCs has in several instances been accompanied by human rights abuses, including

<sup>17</sup>Sven Chojnacki, Nils Metternich, and Johannes Münster, "Mercenaries in Civil Wars, 1950–2000" (Discussion Paper SP II 2009-05, Wissenschaftszentrum Berlin, 2009), <https://www.ssoar.info/ssoar/handle/document/25807>; Ulrich Petersohn, "The Impact of Mercenaries and Private Military and Security Companies on Civil War Severity between 1946 and 2002," *International Interactions* 40, no. 2 (2014): 191–215; Avant and Neu, "Private Security Events Database."

<sup>18</sup>Doug Brooks, "Write a Cheque, End a War: Using Private Military Companies to End African Conflicts," *Conflict Trends* 1 (2000): 33–35.

<sup>19</sup>In the following, we primarily use the term "PMSCs" and do not constantly refer to "PMSCs and mercenaries" for the sake of simplicity, but throughout the article we adopt a broad understanding of the phenomenon in line with the data used for the analysis wherein PMSCs are defined as "vendors that deliver services intended to manage violence" (Avant and Neu, "Private Security Events Database," 5). This includes actors that clearly fall into the "old" mercenary category of a "temporary fighting force for a particular task with no permanent organizational structure" (Petersohn, "Impact of Mercenaries," 195), such as Malian mercenaries hired by former Libyan president Muammar Gaddafi. In our argument and analysis, the distinction is not important. For those interested in the debate on how PMSCs are different from mercenaries, see Petersohn, "Impact of Mercenaries."

<sup>20</sup>Ulrich Petersohn, "Onset of New Business? Private Military and Security Companies and Conflict Onset in Latin America, Africa, and Southeast Asia from 1990 to 2011," *Small Wars & Insurgencies* 32, no. 8 (2021): 21.

<sup>21</sup>Petersohn, "Impact of Mercenaries."

<sup>22</sup>Thomas K. Adams, "Private Military Companies: Mercenaries for the 21st Century," *Small Wars & Insurgencies* 13, no. 2 (2002): 54–67.

<sup>23</sup>An overview of the literature on PMSCs from 1998 to 2012 has identified that research empirically has centered on a few influential cases, with geographical coverage primarily of the United States (40%), the UK (15%), Sierra Leone (13%), the former Yugoslavia (8%), South Africa (7%), Angola (7%), Germany (3%), the EU (2%), and the rest of the world (5%). See Hilde van Meegdenburg, "What the Research on PMSCs Discovered and Neglected: An Appraisal of the Literature," *Contemporary Security Policy* 36, no. 2 (2015): 321–45.

<sup>24</sup>Leander, "Market for Force and Public Security."

high-profile incidents such as the 2007 massacre of civilians in Iraq by Blackwater employees hired by the United States.<sup>25</sup>

Studies have also identified a correlation between PMSC presence and shorter wars, although there are contrasting explanations.<sup>26</sup> One possibility is that severe wars reveal more information about the belligerents' respective capabilities and may thus be both shorter and a contributor to postwar stability.<sup>27</sup> To our knowledge, though, only two studies have previously explored the link between PMSCs and postwar stability, and both have focused primarily on PMSCs providing training for local forces. One study suggests that there may be a higher risk of civil war recurrence if the losing side attributes their defeat primarily to the presence of PMSCs.<sup>28</sup> However, if the PMSCs provide training to their patron's forces but do not engage in combat, the resulting greater military capacity will deter the opponent from restarting the war. The author does not systematically test this argument but draws on empirical information from three prominent cases of wars with PMSC involvement (Croatia, Angola, and Sierra Leone). Another study tests a similar argument about the benefits of PMSC training,<sup>29</sup> but with global data and with somewhat inconclusive results. The authors find that if PMSCs have been present in a war at all, then training activities are associated with a lower risk of recurrence than other PMSC activities (combat, intelligence, communications, etc.), although the results are sensitive to sample selection.

Thus, even as scholarly interest in PMSCs and civil conflict rapidly evolves, many aspects remain insufficiently explored. This study takes a step back and moves away from the focus on how different PMSC services may provide competing effects on the risk of war recurrence. Instead, we focus squarely on the downstream effects of using PMSCs in combat. The deployment of private combatants is the most visible and most notorious form of PMSC involvement in wars, and arguably what many mean when they speak of PMSCs in war. Do these "guns for hire" successfully end wars for good, or do they contribute to a cycle of conflict that ends only to resume shortly after, once the professional soldiers have been paid and have departed?

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<sup>25</sup> Tkach, "Private Military and Security Companies, Corporate Structure, and Levels of Violence in Iraq."

<sup>26</sup> Akcinaroglu and Radziszewski, "Private Military Companies, Opportunities, and Termination of Civil Wars in Africa"; Avant and Neu, "Private Security Events Database"; Christopher M. Faulkner, Joshua E. Lambert, and Jonathan M. Powell, "Reassessing Private Military and Security Company (PMSC) 'Competition' in Civil War: Lessons from Sierra Leone," *Small Wars & Insurgencies* 30, no. 3 (2019): 641–59.

<sup>27</sup> R. Harrison Wagner, "Bargaining and War," *American Journal of Political Science* 44, no. 3 (July 2000): 469–84; Monica Duffy Toft, "Ending Civil Wars: A Case for Rebel Victory?" *International Security* 34, no. 4 (Spring 2010): 7–36.

<sup>28</sup> Faulkner, "Buying Peace?"

<sup>29</sup> Elizabeth Radziszewski and Seden Akcinaroglu, "Private Military & Security Companies, Conflict Complexity, and Peace Duration: An Empirical Analysis," *Small Wars & Insurgencies* 31, no. 7–8 (October–December 2020): 1415–40.

## Civil War Recurrence after Complex Conflict Settings

Most prominent theories on civil conflict onset, termination, and recurrence are developed in a simplified setting with two actors: the government and the opposition. Armed conflict begins following uncertainty about power relations and reservation points during interparty bargaining and ends when warring sides perceive that the costs of continued conflict are greater than the benefits of laying down arms.<sup>30</sup> This does not imply that conflicts always end with a compromise settlement but that parties may renounce the continued use of violence through surrender or by shifting to nonviolent politics if perceived to be less costly and/or more likely to bring success. Indeed, the most common type of civil war termination is a situation with neither a formal peace treaty nor a decisive victory.<sup>31</sup>

Even as large-scale organized violence has ceased, though, many challenges remain for a country to successfully transition from war to peace.<sup>32</sup> The preceding warfare has destroyed or undermined political, security, and economic institutions (including the police force) just when society needs to reintegrate and reconcile former combatants, victims, and refugees into a joint social and political order.<sup>33</sup> Though all these problems have the potential to derail the fragile peace, scholars have identified the lack of trust between the (former) warring sides as the dominant challenge for the creation of long-term stability. In contrast to international wars where belligerents withdraw into their respective territories after hostilities cease, actors need to coexist and potentially even cooperate in post-civil conflict societies. The so-called credible commitment problem centers on the distrust between parties that are uncertain about whether the other side may exploit the situation after demobilization and renege on agreements and seek revenge or greater power.<sup>34</sup> Besides creating problems for parties in reaching an agreement, this trust deficit also increases the risk that violence resumes, as smaller provocations may escalate into full-blown violence.<sup>35</sup> In addition, uncertainty about the other side's motives will likely reduce both parties' willingness to implement agreed provisions such as disarmament, which only further undermines peacebuilding efforts.<sup>36</sup>

<sup>30</sup>James D. Fearon, "Rationalist Explanations for War," *International Organization* 49, no. 3 (Summer 1995): 379–414; T. David Mason and Patrick J. Fett, "How Civil Wars End: A Rational Choice Approach," *Journal of Conflict Resolution* 40, no. 4 (December 1996): 546–68.

<sup>31</sup>Joakim Kreutz, "How and When Armed Conflicts End: Introducing the UCDP Conflict Termination Dataset," *Journal of Peace Research* 47, no. 2 (March 2010): 243–50.

<sup>32</sup>Boyle, *Violence after War*; Bara et al., "Civil War Recurrence and Postwar Violence."

<sup>33</sup>Anders Themnér and Niklas Karlén, "Building a Safety Net: Explaining the Strength of Ex-Military Networks," *Security Studies* 29, no. 2 (April–May 2020): 268–300.

<sup>34</sup>Walter, *Committing to Peace*; Werner and Yuen, "Making and Keeping Peace."

<sup>35</sup>Boyle, *Violence after War*; Alex Worsnop, "Who Can Keep the Peace? Insurgent Organizational Control of Collective Violence," *Security Studies* 26, no. 3 (April–June 2017): 482–516.

<sup>36</sup>Walter, "Does Conflict Beget Conflict?"; Hartzell and Hoddie, *Crafting Peace*.

**Table 1.** Uncertainty about resources and capabilities in post-war contexts.

	Visibility during conflict	
	Yes	No
Monitored postconflict		
Yes	Medium	Low
No	High	Medium/low

Since uncertainty about others' future behavior sits at the core of the credible commitment problem, the challenge is to establish a perception of predictability in interparty interactions. Such predictability, which is also the cornerstone of the establishment of stable political order and social trust, develops as a consequence of repeated observations of each other's behavior.<sup>37</sup> Experiences over the duration of the conflict influence parties' expectations, but more recent behavior carries greater weight as interparty relations evolve.<sup>38</sup> This explains why warring parties are initially cautious with a full cessation of hostilities; they expect that the other side will attack them. However, new information in the form of ceasefires and indications from the opponent about a willingness to compromise on conflict issues may change a party's view about the possibility of continued nonviolent relations. Thus, at the end of conflict, warring sides are torn between their historical experience of fighting and the more recent promises and signals about a commitment to nonviolence.<sup>39</sup> The level of uncertainty in the post-war society can thus be theorized as a combination of information from actions during the conflict and information from postwar behavior. **Table 1** illustrates this relationship. The context with the least uncertainty is a situation where a certain type of warfighting resource or capability has not been observed during the conflict, but warring sides can monitor whether the opponent is gaining access to this resource in the postwar period. In contrast, the most uncertain situation centers around resources and capabilities that were visible during fighting but are impossible to monitor afterward.

During the war, parties exchange information primarily through fighting; other processes are necessary to ensure transparency between parties in the postwar society. To reduce uncertainty, it is common to establish some form of interparty monitoring mechanism in many peace processes. This

<sup>37</sup>Axelrod, *Evolution of Cooperation; Tilly, Trust and Rule*.

<sup>38</sup>Branislav L. Slantchev, "The Principle of Convergence in Wartime Negotiations," *American Political Science Review* 97, no. 4 (November 2003): 621–32; Robert Powell, "Bargaining and Learning While Fighting," *American Journal of Political Science* 48, no. 2 (April 2004): 344–61; Jason Quinn, Madhav Joshi, and Erik Melander, "One Dyadic Peace Leads to Another? Conflict Systems, Terminations, and Net Reduction in Fighting Groups," *International Studies Quarterly* 63, no. 4 (December 2019): 863–75.

<sup>39</sup>Michael McBride and Stergios Skaperdas, "Conflict, Settlement, and the Shadow of the Future," *Journal of Economic Behavior & Organization* 105 (September 2014): 75–89; Padraig McAuliffe, *Transformative Transitional Justice and the Malleability of Post-Conflict States* (Cheltenham, UK: Edward Elgar, 2017).

includes allowing the warring sides to maintain some armed capacity into the postwar period and staggering public disarmament processes to avoid sudden shifts in the balance of power of the respective forces.<sup>40</sup> It also includes joint commissions to monitor and investigate ceasefire violations to ensure that neither side is rearming covertly, and the invitation of international observers or peacekeepers to include neutral stakeholders in the process.<sup>41</sup> It may include power-sharing in military and civilian institutions to further guarantee that neither side can take advantage of the demobilization of the other, and assemble power and resources to eventually renege on agreed provisions.<sup>42</sup>

The challenge for parties to credibly commit is difficult enough in a setting with only two actors, but it gets even more so in more complex settings involving multiple stakeholders with the potential of “spoiling” these reconstruction and trust-building processes. Recent scholarship has increasingly acknowledged the empirical reality that most civil wars contain a multitude of actors with different goals, capabilities, and propensities for violence.<sup>43</sup> This includes multiple rebel groups simultaneously active in a conflict and intervening forces from other countries and/or the use of auxiliary militias for violent ends. In general, more fragmented conflict settings have been found to make a war more difficult to settle and more likely to recur. Conflicts containing multiple rebel—or terrorist—groups are hard to settle, as “spoilers” may provoke a resumption of violence and undermine confidence-building measures.<sup>44</sup> External military intervention to support any warring side creates a situation with more stakeholders in the conflict outcome that typically hinders resolution and, crucially, increases the probability of resumption.<sup>45</sup> Notably, this risk is greater if the external support comes from state forces rather than diaspora linkages, suggesting that auxiliary boots-on-the-ground involvement is conceptually different from behind-the-scenes recruitment and funding.<sup>46</sup> A similar negative effect on

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<sup>40</sup>Robert Muggah, ed., *Security and Post-Conflict Reconstruction: Dealing with Fighters in the Aftermath of War* (London: Routledge, 2009).

<sup>41</sup>Walter, *Committing to Peace*; Fortna, “Does Peacekeeping Keep Peace?”

<sup>42</sup>Hartzell and Hoddie, *Crafting Peace*.

<sup>43</sup>Corinna Jentzsch, Stathis N. Kalyvas, and Livia Isabella Schubiger, “Militias in Civil Wars,” *Journal of Conflict Resolution* 59, no. 5 (August 2015): 755–69; Belgin San-Akca, *States in Disguise: Causes of State Support for Rebel Groups* (Oxford: Oxford University Press, 2016); David Malet, *Foreign Fighters: Transnational Identity in Civil Conflicts*, 2nd ed. (Oxford: Oxford University Press, 2017); Paul Staniland, “Armed Politics and the Study of Intrastate Conflict,” *Journal of Peace Research* 54, no. 4 (July 2017): 459–67; Caitlin Ambrozik, “Not Whether, But When? Governments’ Use of Militias in War,” *Security Studies* 28, no. 5 (October–December 2019): 870–900.

<sup>44</sup>Wendy Pearlman, “Spoiling Inside and Out: Internal Political Contestation and the Middle East Peace Process,” *International Security* 33, no. 3 (Winter 2008/09): 79–109; Michael G. Findley and Joseph K. Young, “Terrorism, Spoiling, and the Resolution of Civil Wars,” *Journal of Politics* 77, no. 4 (October 2015): 1115–28.

<sup>45</sup>Karlén, “Legacy of Foreign Patrons.”

<sup>46</sup>James A. Piazza, “Transnational Ethnic Diasporas and the Survival of Terrorist Organizations,” *Security Studies* 27, no. 4 (October–December 2018): 607–32; Marina G. Petrova, “What Matters Is Who Supports You: Diaspora and Foreign States as External Supporters and Militants’ Adoption of Nonviolence,” *Journal of Conflict Resolution* 63, no. 9 (October 2019): 2155–79.

the likelihood of conflict termination and the duration of peace exists for conflicts where governments or rebels have received support from militias.<sup>47</sup>

Do PMSCs and mercenaries have a similar effect as intervening state forces, fragmented rebel movements, or militia forces? An important difference between these latter actors and commercial actors is the extent to which they are stakeholders in the postwar society. External interveners, rebel movements, and militias have all joined the conflict because of a preference regarding the state's subsequent political and institutional organization. These preferences may be loosely formulated—for example, by self-defense militias—or primarily consist of an ambition to block certain other actors from influence, but there is nevertheless a political dimension to these actors' involvement. This makes their behavior somewhat more predictable, as it will be evident whether they are likely supportive or critical of the political order established in the postwar society. It can also be expected that the postwar behavior of actors who have entered the conflict for political aims is easier to monitor for the warring sides, which should reduce uncertainty.

External state interveners must consider the political costs related to changes in strategy, which makes the deployment process slower and more visible. Before sending troops to intervene in a civil war in another country there may be parliamentary debates, discussions in the media, and a period of preparation in the form of training and equipping the forces.<sup>48</sup> The decision to withdraw will face similar political, media, and public scrutiny, especially if the involvement leads to casualties. Further, external force interventions are often preceded by sanctions, threats, or deliveries of arms and perhaps advisors to a party in the conflict, providing another form of "early warning." This means that from the point of view of warring parties in the conflict, the complexity and controversy around the decisions of force deployment or withdrawal and the sequencing of measures provide a certain predictability and reduce the risk of surprising policy reversals. When it comes to the presence of rebel breakaway factions or militias, the same predictability in behavior is less likely, but these actors differ from PMSCs for two other reasons. First, they are rarely as militarily capable as PMSCs and therefore constitute less of a threat to the postwar balance of power. Second, they remain connected to the local context, making their behavior easier to monitor, and they may even be included in demobilization and reintegration efforts.

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<sup>47</sup>Joakim Kreutz, "New Rebels in Postconflict Settings: The Principal-Agent Dilemma of Peacebuilding," *Peace & Change* 43, no. 2 (April 2018): 218–47; Steinert et al., "Spoilers of Peace."

<sup>48</sup>Yaacov Y. I. Vertzberger, *Risk Taking and Decisionmaking: Foreign Military Intervention Decisions* (Stanford, CA: Stanford University Press, 1998).

In contrast, PMSCs provide a potential source of violence in the postwar society that is both difficult to predict and monitor. These companies have no explicit aims for said society beyond protecting their commercial assets and the possibility of future contracts. From the outset, these actors' lack of entanglement in local affairs may seem beneficial for the general process of reconstruction and reconciliation. There is no need to organize an expensive and sensitive disarmament and demobilization process for PMSCs, as they withdraw as soon as their contract ends. There may be shortcomings in holding PMSCs accountable for wartime actions in transitional justice and reconciliation efforts, but there is also less of a risk of revenge attacks—these fighters do not resettle into the same society as the victims. Yet, we contend that the use of PMSCs in conflict creates a legacy that exacerbates the postwar credible commitment problem and increases the risk of civil war recurrence. The logic behind this reasoning is that it is not the PMSCs that are responsible for renewed violence, but rather how previous use of such auxiliary forces creates uncertainty about actors' peaceful intentions.

A defining feature of PMSCs is that they constitute an option that can be contracted and deployed more quickly and more covertly in a postwar setting, whereas the (re-)recruitment, training, and mobilization of locals take more time. At the same time, PMSC forces are more expensive than raising an army, so they are only used when necessary and for a limited time.<sup>49</sup> Consequently, PMSCs constitute a more flexible mobilization option with the added advantage that their presence is not monitored after the end of conflict. Since they are based outside the postwar society, the different institutional and administrative mechanisms that may be used in a peace process to rebuild interparty trust and address the credible commitment problem do not apply to PMSCs or mercenaries. These are neither forces that can be included in a transparent and staggered demobilization process, nor can observers or peacekeepers monitor their cantonment.<sup>50</sup> The knowledge that warring sides have previously used PMSCs forces or mercenaries, however, fosters uncertainty about whether this could happen again. Thus, the possibility of PMSC deployment is an example of a realistic threat due to their previous involvement, but they are simultaneously a force that cannot be monitored in the postwar setting. This constitutes the context with the greatest uncertainty as illustrated in [Table 1](#).

A consequence of this uncertainty is that actors concerned with the risk of a surprise attack may be unwilling to fulfill their obligations, which

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<sup>49</sup>Akcinaroglu and Radziszewski, "Private Military Companies, Opportunities, and Termination of Civil Wars in Africa."

<sup>50</sup>Walter, *Committing to Peace*; Fortna, "Does Peacekeeping Keep Peace?"

others may interpret as preparation for renewed war.<sup>51</sup> This creates a postwar environment where we expect a generally higher risk of civil war recurrence irrespective of the actual events that lead to the resumption of violence. This can be illustrated by the situation in the Central African Republic after a United Nations (UN)–mandated French intervention led to the cessation of fighting there in 2013. Despite active engagement by the UN, the African Union, and the Economic Community of Central African States, the competing alliances Séléka and anti-Balaka were reluctant to demobilize and disarm.<sup>52</sup> A particular challenge was the lack of information regarding the exact size and membership of these armed movements, making each actor reluctant to be the first one to commit to disarmament and potentially expose themselves. This was because both sides largely consisted of forces that were difficult to monitor. The Séléka was generally better armed, disciplined, and militarily structured, but it was estimated in 2013 to consist of around 80 percent of mercenaries recruited from neighboring Chad and Sudan.<sup>53</sup> In contrast, the anti-Balaka was a loose collection of local militias without clear command structures or cohesion. Even after the end of conflict, politicians and community leaders publicly declared that they “could put 3,000 armed men on the streets any time.”<sup>54</sup> The conflict resumed in 2017 and continued to attract PMSC and mercenary involvement, including the Russia-affiliated Wagner Group.<sup>55</sup> This general exacerbation of uncertainty and the credible commitment problem following PMSC involvement leads to our first hypothesis:

**Hypothesis 1a(H1a).** Civil conflicts with PMSC or mercenary combat involvement are more likely to recur.

To probe our proposed theory in detail and to address possible selection effects and competing explanations, we further develop some complementary and more detailed hypotheses. First, if our premise that former belligerents’ behavior in a postwar society is based on information from the preceding conflict, then more recent experiences should carry greater

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<sup>51</sup>Axelrod, *Evolution of Cooperation*; McBride and Skaperdas, “Conflict, Settlement, and the Shadow of the Future.”

<sup>52</sup>Silke Rusch, *Peace Agreements and Disarmament, Demobilization and Reintegration (DDR): Insights from the Central African Republic and Libya* (Center for Security Studies, ETH Zürich, July 1, 2021), <https://css.ethz.ch/en/center/CSS-news/2021/07/peace-agreements-and-disarmament-demobilization-and-reintegration-ddr-insights-from-the-central-african-republic-and-libya.html>.

<sup>53</sup>Tim Glawion and Lotje de Vries, “Ruptures Revoked: Why the Central African Republic’s Unprecedented Crisis Has Not Altered Deep-Seated Patterns of Governance,” *Journal of Modern African Studies* 56, no. 3 (September 2018): 421–42; Peter Knoope and Stephen Buchanan-Clarke, “Central African Republic: A Conflict Misunderstood,” Institute for Justice and Reconciliation Occasional Paper 22 (2017): 1–21, <https://www.ijr.org.za/portfolio-items/central-african-republic-a-conflict-misunderstood/>.

<sup>54</sup>Glawion and de Vries, “Ruptures Revoked,” 437.

<sup>55</sup>Kimberly Marten, “Russia’s Use of Semi-State Security Forces: The Case of the Wagner Group,” *Post-Soviet Affairs* 35, no. 3 (2019): 181–204.

weight than more distant historical events.<sup>56</sup> It is therefore important to explore not only whether but also when during the previous conflict PMSCs were used. Several recent studies that explore the temporal informational dimension of civil war dynamics have found that belligerents are remarkably sensitive to changing circumstances to adjust their behavior.<sup>57</sup> Since we contend that the legacy of PMSC use in conflict has a negative effect on the subsequent credible commitment problem, we would logically expect this effect to be particularly strong when PMSCs have participated in combat during the final phase prior to conflict termination.

Second, since our argument centers on how belligerents rely on information from previous experience for predicting future behavior, we should also see a greater effect related to the visibility of the PMSC involvement. As noted in previous research,<sup>58</sup> if PMSC involvement is limited to behind-the-scenes training of local troops, that should have a more limited effect on the subsequent credible commitment problem. It is primarily through the visible use of PMSCs at the front lines that belligerents collect information about their potential use in the future. To illustrate how the deployment of PMSCs can lead to the end of fighting but an unstable peace, consider the case of Angola in the mid-1990s. After two decades of civil war, the rebel group UNITA (União Nacional para a Independência Total de Angola) controlled some 80 percent of the countryside as the government contracted Executive Outcomes in September 1993. The well-trained PMSC troops quickly forced UNITA on the defensive, leading to the signing of a peace agreement in November 1994 that established a UN-monitored demobilization process and political power sharing in a transitional government.<sup>59</sup> Despite these measures, implementation of the agreement was slow on both sides. UNITA refused to relinquish control of several strategically important territories. Four years after the peace deal, both sides were relaying landmines, and UNITA leader Jonas Savimbi cited security fears and the government's lack of implementation of many provisions for his refusal to participate in meetings in the capital of Luanda.<sup>60</sup> Shortly thereafter, ceasefire violations escalated to the resumption of full-scale war and the withdrawal of the UN peacekeeping mission.<sup>61</sup> The lack of trust

<sup>56</sup>Slantchev, "Principle of Convergence in Wartime Negotiations"; Quinn et al., "One Dyadic Peace Leads to Another?"

<sup>57</sup>Worsnop, "Who Can Keep the Peace?"; Ambrozik, "Not Whether, but When?"; Kaisa Hinkkainen Elliott and Joakim Kreutz, "Natural Resource Wars in the Shadow of the Future: Explaining Spatial Dynamics of Violence during Civil War," *Journal of Peace Research* 56, no. 4 (July 2019): 499–513.

<sup>58</sup>Faulkner, "Buying Peace?"; Radziszewski and Akcinaroglu, "Private Military & Security Companies, Conflict Complexity, and Peace Duration."

<sup>59</sup>Howe, "Private Security Forces and African Stability."

<sup>60</sup>David Simon, "Angola: Things Fall Apart Again?" *South African Journal of International Affairs* 6, no. 1 (1998): 67–72.

<sup>61</sup>Adekeye Adebajo and Chris Landsberg, "Back to the Future: UN Peacekeeping in Africa," *International Peacekeeping* 7, no. 4 (2000): 161–88.

between warring sides in Angola hampered the poor implementation of settlement provisions, which in turn further eroded trust and willingness to cooperate. We argue that a source of the mistrust for the rebels was their recent experience of battlefield losses due to the PMSC involvement, and a concern that the government could redeploy such forces and renege on the settlement terms. Based on this reasoning, we deduce two complementary and conditional hypotheses to test our theoretical mechanism:

**Hypothesis 1b (H1b).** Civil conflicts with PMSC or mercenary combat involvement during the final year are more likely to recur.

**Hypothesis 1c (H1c).** Civil conflicts with higher levels of PMSC or mercenary combat involvement are more likely to recur.

## Research Design

To evaluate these hypotheses, we use information on the duration of peace after the end of civil war from the UCDP/PRIO Armed Conflict Dataset v21.1.<sup>62</sup> UCDP defines internal armed conflict as (1) a stated incompatibility over government or territory (2) between an organized group and the government of a state that causes (3) at least twenty-five battle-related deaths in a calendar year. A conflict is considered terminated when an active year is followed by a year that does not fulfill these three criteria and resumed whenever these criteria are met again following at least one calendar year of peace.<sup>63</sup> Although this definition includes recurrences involving any rebel group with similar aims as in the previous episode, all recur cases following PMSC involvement contain the same warring sides as before.<sup>64</sup> Our dependent variable is coded as the time (in years) until war resumes and is right-censored in 2014.<sup>65</sup>

We also require information about PMSC and mercenary combat involvement in conflict, when this has occurred, and how visible this participation has been. Such detailed information is available in PSED, which traces the involvement of PMSCs in events in Africa, Latin America, and Southeast Asia using information from news reports. The authors define PMSC as “vendors that deliver services intended to manage violence,”<sup>66</sup> a broad conceptualization that also includes unnamed or lesser known (for

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<sup>62</sup>Gleditsch et al., “Armed Conflict 1946–2001”; Pettersson, “Organized Violence 1989–2020.”

<sup>63</sup>Kreutz, “How and When Armed Conflicts End.”

<sup>64</sup>For recurrence after PMSC involvement, 80% involve the same warring sides as before and 20% a breakaway faction from an earlier warring party. In comparison, in recurrences without a legacy of PMSC involvement, 78% include same warring sides, 16% a breakaway faction, and 6% a new rebel organization.

<sup>65</sup>The year 2014 is the first in which there can be a possible recurrence for a conflict that ended in 2012, which is the last year for which we have information on PMSCs and mercenaries.

<sup>66</sup>Avant and Neu, “Private Security Events Database,” 5.

instance, local) PMSCs that are closer to a contemporary definition of mercenaries. Since we analyze conflict (not country) data, and our argument relates to the combat involvement of PMSCs, we focus on a subset of events from the PSED data. Specifically, we select only events in which PMSCs provide services on or near the battlefield in support of belligerent forces. This excludes events relating to site security, advising and training the military or police, intelligence gathering, or logistical support. Moreover, we focus only on events where PMSCs provide services to the government or a rebel group, or clients with clear links to these actors. We thus exclude events in which PMSCs are hired by other clients, such as companies, criminals, intergovernmental organizations or NGOs, and others.

Note that PSED provides country-level data, whereas we use conflict-level data, and multiple different conflicts can be active in the same country. We therefore hand-matched the PSED data onto the UCDP/PRIO conflict dataset by assigning events to the “right” conflict using the short event description in the data. Of the several rebel groups active in Myanmar, for instance, only the Karen National Liberation Army hired PMSCs in the 1990s, so we consequently coded PMSC presence only for this conflict. This gives us a dataset containing 113 post-civil conflict episodes between 1990 and 2012, with a peace duration ranging from one to twenty-two years. The availability of detailed data on PMSCs determines the geographic and temporal coverage for the study. To explore the robustness and generalizability of our results, we also analyze our basic models using datasets with slightly different definitions but global coverage.<sup>67</sup>

Our argument focuses on the visibility and use of PMSCs in combat, and we construct several independent variables based on the event information provided in PSED. Our most basic analysis employs a dichotomous variable that indicates whether there have been any PMSC combat events at any point during the preceding conflict. However, to test the observable implications of our causal mechanism, we also proxy more intense—and thus more visible—PMSC activity with a count of reported PMSC events. For our conditional hypothesis focusing on the temporality of information about actor behavior, we created both a binary and a count variable indicating PMSC activities solely in the final year of the conflict. As the descriptive statistics in [Table 2](#) show, the majority of conflicts in our sample did not see any involvement of PMSCs. Only 28% of conflicts had reported PMSC involvement and only 15% in the last conflict year.<sup>68</sup> While

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<sup>67</sup>Radziszewski and Akcinaroglu, “Private Military & Security Companies, Conflict Complexity, and Peace Duration”; Malet, *Foreign Fighters*. See also a more extensive discussion about possible bias in the online appendix.

<sup>68</sup>We have no theoretical expectation that our argument applies only to government- or rebel-hired PMSCs—that is, there should be no difference in effect depending on who hires the PMSCs. In the online appendix we

**Table 2.** Descriptive statistics on PMSC combat involvement in civil conflicts, 1990–2012.

Variable	Conflicts with PMSC events (%)	Conflicts with PMSC, last conflict year (%)	Mean (max.) number of PMSC events
Any PMSC events	28	15	1.52 (max. 27)
Gov.-hired	19	9	1.01 (max. 25)
Rebel-hired	22	9	.51 (max. 8)

**Table 3.** Control variable descriptive statistics.

Variable	<i>N</i>	Panels	Mean	Min.	Max.
Conflict duration (years)	763	113	6.24	1	44
Conflict ended in negotiated settlement	763	113	0.27	0	1
Conflict ended in victory	763	113	0.28	0	1
Number of UN personnel (ln)	763	113	0.74	0	9.98
GDP per capita (ln)	763	113	7.24	4.89	9.42
Natural resources rents in % of GDP (ln)	763	113	2.01	−.96	4.33

an absence of reporting on PMSC events does not guarantee that PMSCs or mercenaries were indeed completely absent, our argument directly references their visibility—that is, our theoretical logic is still tested even if covert presence of PMSCs is underreported in the data.

### Control Variables

Our models are deliberately parsimonious and only include a carefully selected set of control variables given the limited number of postwar periods in the sample. Moreover, there is little knowledge on the factors that affect whether PMSCs get involved in conflicts. Table 3 shows descriptive statistics on these variables.

We control for the duration of the conflict since this indicates belligerents' inability to militarily succeed, which creates a situation where it is tempting to seek assistance from a PMSC. Moreover, research has shown that the credible commitment problem is greater after longer conflicts due to the presence of parallel (rebel) institutions and greater societal polarization.<sup>69</sup> We also control for how the preceding conflict ended, as the boost of military capacity from the use of PMSCs or mercenaries increases the likelihood of victory, which in turn may make conflict recurrence less likely.<sup>70</sup> Sudden shifts in interparty power relations can also make parties reach a settlement, and it is typical for peace agreements and ceasefires to include confidence-building provisions to overcome the credible

show results for our main models after distinguishing between government- and rebel-hired PMSCs and find no substantive difference.

<sup>69</sup>Walter, "Does Conflict Beget Conflict?"; Staniland, "Armed Politics and the Study of Intrastate Conflict."

<sup>70</sup>Akcinaroglu and Radziszewski, "Private Military Companies, Opportunities, and Termination of Civil Wars in Africa"; Toft, "Ending Civil Wars." Data from Kreutz, "How and When Armed Conflicts End."

commitment problem.<sup>71</sup> Our variable for negotiated settlement includes both conflicts that end with a ceasefire and those that end with a peace agreement. Presence of international peacekeepers is a crucial measure, which we control by using the log-transformed yearly presence of UN troops, police, and observers.<sup>72</sup> Our final set of controls relate to the post-war economic situation. Our first variable is a log-transformed measure of gross domestic product (GDP) per capita<sup>73</sup> that serves as a proxy for post-war state capacity and an indicator of the overall opportunity cost for rebellion. Weak state capacity makes rebellion more tempting for recently demobilized combatants, whereas demand for commercial military actors may be greater in the absence of strong government institutions. Our final control variable consists of the total natural resource rents in percent of GDP.<sup>74</sup> Scholars have shown that the private security sector is often deeply enmeshed in the nexus between natural resources and civil wars, as PMSCs not only protect natural resource extraction sites but are frequently paid in the form of concessions from this industry.<sup>75</sup> Moreover, conflicts motivated by natural resource distribution issues are more likely to recur.<sup>76</sup>

### **Method and Modeling Approach**

We employ duration analysis to model the risk of conflict recurrence as a function of time in years until a conflict resumes. Specifically, we use a Cox proportional hazards model, which leaves the shape of the baseline hazard unspecified. The shape of the baseline hazard represents how the risk of recurrence evolves over time; that is, whether it decreases linearly as the postwar period goes on, or does so exponentially, or first increases then decreases, etc. Leaving the baseline hazard of recurrence unspecified offers the best chance at unbiased coefficient estimates if there are no clear

<sup>71</sup>Walter, *Committing to Peace*; Fortna, "Does Peacekeeping Keep Peace?"; Robert Powell "Persistent Fighting and Shifting Power," *American Journal of Political Science* 56, no. 3 (July 2012): 620–37.

<sup>72</sup>Data from the International Peace Institute, IPI Peacekeeping Database, <https://www.ipinst.org/providing-for-peacekeeping-database>.

<sup>73</sup>Data from Kristian Skrede Gleditsch, "Expanded Trade and GDP Data," *Journal of Conflict Resolution* 46, no. 5 (October 2002): 712–24, which we interpolate for a handful of missing observations and extrapolate to cover the years 2012 and 2013.

<sup>74</sup>Data from the World Bank, "Total Natural Resources Rents (% of GDP)," <https://data.worldbank.org/indicator/NY.GDP.TOTL.RT.ZS>. We linearly interpolated between years to avoid missing observations. The available data cover 1990, 2000, and then annually from 2010 onward. In most cases, the rough amount of GDP that comes from resource rents does not fluctuate massively over time in a country, and we are most interested in the cross-sectional difference between countries, not the over-time developments; hence the interpolated data suffices for our purpose.

<sup>75</sup>Mpako H. Foaeng, "Private Military and Security Companies and the Nexus between Natural Resources and Civil Wars in Africa," in Sabelo Gumede, ed., *Private Security in Africa: Manifestation, Challenges and Regulation*, ISS Monograph Series 139 (Pretoria: Institute for Security Studies [ISS], 2007), 39–56.

<sup>76</sup>Siri Aas Rustad and Helga Malmin Binningsbø, "A Price Worth Fighting For? Natural Resources and Conflict Recurrence," *Journal of Peace Research* 49, no. 4 (July 2012): 531–46.

expectations about the shape of the hazard.<sup>77</sup> The Cox model thus allows us to test the effect of the covariates—particularly PMSCs—on the duration of peace.

As is common in observational studies, there are endogeneity concerns when estimating the impact of PMSCs on the risk of conflict recurrence. If PMSCs are particularly prevalent in certain types of conflicts, and if these conflicts are particularly likely to recur for reasons apart from the PMSCs themselves, we may mistakenly attribute that increased risk to the legacy of PMSC involvement. Although our control variables are designed to mitigate this concern, we also employ matching as an additional strategy to address this threat to inference. Matching preprocesses the data by pairing postwar observations of wars that have PMSC involvement with postwar observations as similar as possible in terms of control variables but with a crucial difference—there was no PMSC involvement. This process discards postwar periods that do not compare well on factors of interest. To create the matched sample, we first analyze how imbalanced our sample is with regard to all control variables, using both univariate and multivariate covariate imbalance measures.<sup>78</sup> With all six variables, the multivariate covariate imbalance is 0.82, which is substantial. Conflict duration, peacekeeping, GDP, and natural resources especially are differently distributed between PMSC and non-PMSC cases. On these four variables alone, multivariate imbalance is 0.74. Given the low number of postwar periods, we match only on these most problematic variables using CEM.<sup>79</sup>

CEM coarsens each variable into groups (or “bins”) and then only matches cases that have all variables in the same bins. For the subsequent analysis, the uncoarsened values are used when including the same variables in the analysis. This double strategy—matching on and controlling for the same confounders—improves inference if imbalance remains after matching, which is usually the case. In our case, multivariate covariate imbalance is reduced from 0.74 before matching on the four variables to 0.47 after matching; hence quite some imbalance remains.<sup>80</sup> We also lose seven postwar periods that had PMSC involvement during the conflict. Given these restrictions, and because matching can only eliminate bias from observed confounders, matching should be seen as one strategy, even if imperfect, to increase confidence in our results.

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<sup>77</sup>Janet M. Box-Steffensmeier and Bradford S. Jones, *Event History Modeling: A Guide for Social Scientists* (Cambridge: Cambridge University Press, 2004).

<sup>78</sup>Stefano M. Iacus, Gary King, and Giuseppe Porro, “Causal Inference without Balance Checking: Coarsened Exact Matching,” *Political Analysis* 20, no. 1 (Winter 2012): 1–24.

<sup>79</sup>Iacus et al., “Causal Inference without Balance Checking.”

<sup>80</sup>Information on the coarsening values (bins) is in the online appendix.

**Table 4.** Cox estimates PMSC and civil war recurrence, 1990–2014.

	(1)	(2)	(3)	(4)
PMSC during conflict	1.64* (0.47)	2.01** (0.67)		
PMSC last year			2.41*** (0.70)	3.05*** (1.21)
PMSC previous years				0.54 (0.21)
Conflict duration	1.00 (0.01)	1.00 (0.02)	1.01 (0.01)	0.98 (0.02)
Victory	0.26*** (0.13)	0.25** (0.16)	0.24*** (0.11)	0.20** (0.13)
Settlement	0.59 (0.20)	0.26** (0.17)	0.52** (0.17)	0.31** (0.15)
UN totals (ln)	0.96 (0.05)	1.03 (0.08)	0.96 (0.05)	0.96 (0.05)
GDP per capita (ln)	1.02 (0.16)	1.12 (0.30)	1.01 (0.16)	0.97 (0.19)
Resource rents per capita (ln)	1.01 (0.13)	0.85 (0.19)	1.02 (0.13)	1.01 (0.21)
Postwar periods	113	63	113	60
<i>N</i>	763	391	763	331

Note: Cox hazard ratios with robust standard errors in parentheses.

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

## Findings

We argue that the postwar credible commitment problem is greater if PMSCs or mercenaries have been actively involved in combat during the preceding war, and this increases the likelihood that peace fails. We further suggest that PMSC involvement in the last year of fighting prior to the war's end would be the most detrimental, as this constitutes the most recent information available for belligerents about whether their opponent can be trusted to implement an agreement. The empirical analysis supports these expectations. Table 4 shows the estimates of our Cox regression analysis of war recurrence. The coefficients are hazard ratios, which are easily interpreted as a percent change in risk if the value of a variable changes by one unit. Ratios above 1 indicate that peace fails on average more quickly with higher PMSC values; hazard ratios below 1 indicate longer spells of peace with higher PMSC values.<sup>81</sup> Model 1 tests the relationship between PMSC combat involvement during any year of the preceding conflict and recurrence. If PMSCs were actively involved in combat during the war, the risk of recurrence is 64 percent higher than if no PMSCs were active. This finding holds in a matched sample with many fewer—but more comparable—postwar periods (Model 2). Hypothesis 1a thus receives clear support.

<sup>81</sup>Note that we have tested all models reported in this study for nonproportional hazards to ascertain that our estimates are not biased because certain covariates affect the risk of recurrence differently at different times in the postwar period. See Janet M. Box-Steffensmeier, Dan Reiter, and Christopher Zorn, "Nonproportional Hazards and Event History Analysis in International Relations," *Journal of Conflict Resolution* 47, no. 1 (February 2003): 33–53.

Model 3 shows that if we consider only PMSC involvement in the final year of a conflict, when we expect these private actors' destabilizing effect on the postwar period to be particularly strong, the risk of recurrence more than doubles. This is in line with H1b. However, as 47 percent of conflicts in our sample are very short—that is, they do not last longer than one year, it is difficult to interpret the effects of the temporal dimension of informational exchange during the fighting. Bargaining theory posits that conflicts end when sufficient information about belligerents' respective strengths is revealed, which means that brief conflicts should constitute cases where the balance of power is apparent. Since we contend that the deployment of PMSCs creates uncertainty in the interparty relationship, we therefore separate PMSC involvement specifically in the last conflict year from their use in any previous conflict year. This distinction is, of course, only possible regarding conflicts that last at least two years, which is why our sample in Model 4 is much smaller. We find, however, strong support for our proposition that PMSC use in the final conflict year has a strong destabilizing effect on postwar peace, whereas PMSC involvement in earlier years does not.<sup>82</sup>

Having identified support for our main hypothesis and the first conditional hypothesis, we now explore the substantive effect of these correlations. **Figure 1** shows the Kaplan–Meier survival curve for two types of postwar periods: postwar periods after conflicts without any PMSC combat activity (gray), and postwar periods after conflicts where PMSCs have been involved in combat (black), holding all other variables at their mean value. The graph shows that peace, on average, fails after only a year in more than a quarter of the cases with a legacy of PMSC activity, compared to about a fifth of cases without. Three years after conflicts with PMSC activity, only half the cases remain at peace. For conflicts without PMSCs, on the other hand, it takes nine years until half the wars have resumed.

We have established that conflicts with PMSC involvement are more likely to recur, and shown that the risk is particularly pronounced if such actors are deployed during a conflict's final year. The latter indicates support for our argument that the reason for postwar instability after PMSC use is increased uncertainty and an exacerbation of the credible commitment problem. Next, we probe this mechanism further by investigating our second conditional hypothesis: that the effect will be contingent on the visibility of PMSCs on the battlefield. As fighting reveals information about the opponent, we expect that more visible PMSC involvement, which we

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<sup>82</sup>Additional analyses confirm that PMSC involvement specifically in the final year increases the risk of recurrence, with no effect for involvement in the second- and third-last conflict years. Moreover, the total amount of years with PMSC involvement has no statistically significant effect on recurrence. See the online appendix.

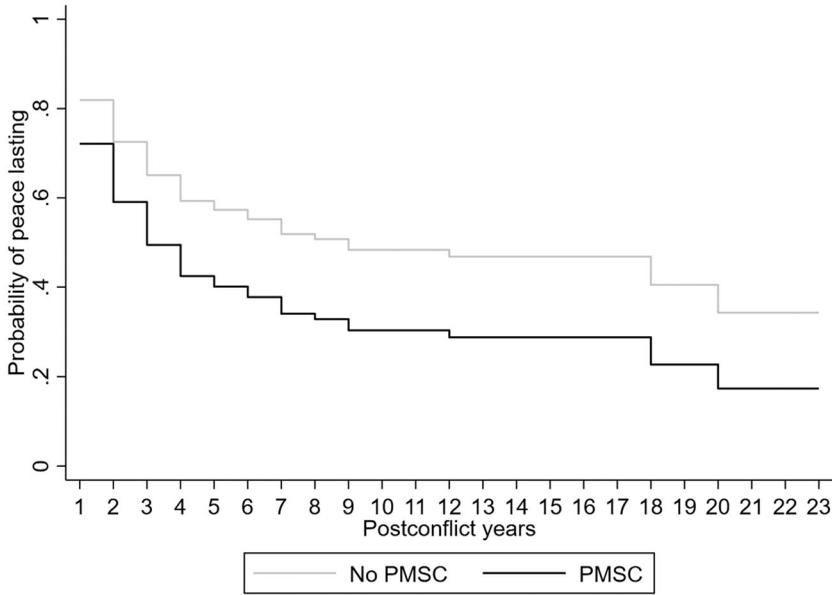


Figure 1. PMSC combat activities during war and probability of peace lasting over time.

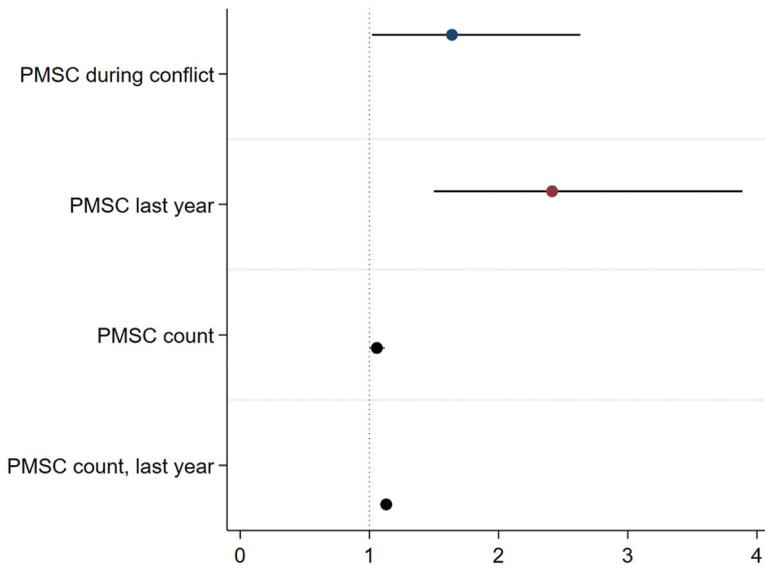


Figure 2. Coefficient plot timing and intensity of PMSC combat involvement.

proxy via the number of reported PMSC combat events, will increase the risk of civil war recurrence. The coefficient plot in Figure 2 shows support for this basic test of our mechanism. The first two models in the coefficient plot correspond with Models 1 and 3 in Table 4 and are included to reiterate our general findings, whereas the last two models report the results for

**Table 5.** PMSC and civil war recurrence in fragmented contexts, 1990–2014.

	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
PMSC last year	2.05* (0.77)	2.51** (1.17)	2.25*** (0.70)	2.94** (1.48)	2.14** (0.64)	2.97*** (1.18)	2.20* (0.92)	2.78* (1.69)
PMSC previous years		0.41 (0.24)		0.51 (0.23)		0.51 (0.21)		0.41 (0.30)
External intervention	0.72 (0.29)	1.08 (0.62)					0.71 (0.32)	0.94 (0.64)
Progovernment militias			0.89 (0.29)	0.64 (0.27)			0.96 (0.30)	0.72 (0.34)
Multiple rebel groups					1.77* (0.61)	1.56 (0.81)	1.10 (0.43)	0.74 (0.75)
Conflict duration	1.00 (0.01)	0.97 (0.03)	1.00 (0.01)	0.98 (0.02)	1.00 (0.01)	0.98 (0.02)	1.00 (0.01)	0.97 (0.03)
Victory	0.17*** (0.10)	0.16*** (0.11)	0.13*** (0.08)	0.15** (0.12)	0.22*** (0.11)	0.17** (0.13)	0.13*** (0.09)	0.19* (0.17)
Settlement	0.48** (0.17)	0.30** (0.16)	0.51* (0.18)	0.35** (0.17)	0.50** (0.17)	0.30** (0.14)	0.49* (0.18)	0.34* (0.21)
UN totals (ln)	0.98 (0.07)	1.00 (0.08)	0.97 (0.05)	0.98 (0.06)	0.96 (0.05)	0.96 (0.05)	0.96 (0.06)	1.02 (0.09)
GDP per capita (ln)	1.03 (0.18)	1.36 (0.34)	1.06 (0.19)	1.04 (0.26)	1.03 (0.16)	0.97 (0.19)	1.01 (0.20)	1.29 (0.45)
Resource rents per capita (ln)	1.04 (0.16)	0.99 (0.22)	1.05 (0.28)	1.11 (0.24)	1.02 (0.13)	1.00 (0.21)	1.04 (0.17)	1.04 (0.26)
Postwar periods	87	48	95	51	113	60	81	44
<i>N</i>	617	261	719	309	763	331	607	257

Note: Cox hazard ratios with robust standard errors in parentheses.

\* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

the visibility hypothesis. Both when we focus on the conflict overall or specifically on its final year, we find that a higher count of combat events with PMSC involvement is associated with a higher risk of war recurrence. Postestimation analyses find a substantial effect: each additional reported event of PMSC combat in the final year increases the risk of recurrence by 13 percent.

Our findings clearly indicate that the use of PMSCs in conflict creates a challenging postwar legacy, as these forces may be deployed again but cannot be monitored. This tracks with research that has shown that the overall involvement of multiple actors in civil wars makes them more likely to recur.<sup>83</sup> In Table 5, we present a series of estimations that account for the possibility that PMSCs are systematically used in such already-fragmented conflict settings, which could potentially make our findings spurious. As previously identified, the PMSC effect is most pronounced for their use in the final year of fighting; hence, we add information about the end-of-conflict presence of external state forces, progovernment militias, and multiple rebel groups.<sup>84</sup> All types of auxiliary forces are more difficult to observe in the postwar environment than the military wings of the warring

<sup>83</sup>Karlén, "Legacy of Foreign Patrons"; Pearlman, "Spoiling Inside and Out"; Steinert et al., "Spoilers of Peace."

<sup>84</sup>Data from Pettersson, "Organized Violence 1989–2020"; Sabine C. Carey, Neil J. Mitchell, and Katrin Paula, "The Life, Death and Diversity of Pro-Government Militias: The Fully Revised Pro-Government Militias Database Version 2.0," *Research & Politics* 9, no. 1 (January–March 2022): 1–9, <https://doi.org/10.1177/2F20531680211062772>.

**Table 6.** Cox estimates of PMSCs and civil war recurrence, 1990–2014. Additional estimations.

	(13)	(14)	(15)	(16)	(17)	(18)	(19)
PMSC during conflict	1.83* (0.65)		1.69* (0.53)		1.40 (0.53)	1.83*** (0.38)	1.49* (0.34)
PMSC last year		2.42** (0.99)		2.60*** (0.79)			
PMSC postwar count			0.91 (0.17)	0.87 (0.15)			
Rebel–government ratio	0.88 (0.09)	0.88 (0.08)					
Conflict duration	1.00 (0.02)	1.00 (0.02)	1.00 (0.01)	1.00 (0.01)	1.01 (0.02)	1.01 (0.01)	1.01 (0.01)
Victory	0.31* (0.19)	0.30* (0.19)	0.26*** (0.13)	0.23** (0.11)	0.15*** (0.07)	0.25*** (0.09)	0.24*** (0.09)
Settlement	0.23 (0.22)	0.22 (0.22)	0.59 (0.20)	0.51** (0.17)	0.64 (0.20)	0.63* (0.16)	0.62** (0.15)
UN totals (ln)	1.09 (0.09)	1.07 (0.09)	0.96 (0.05)	0.96 (0.05)	0.90* (0.06)	0.91** (0.04)	0.92 (0.05)
GDP per capita (ln)	0.90 (0.36)	0.90 (0.33)	1.02 (0.16)	1.02 (0.16)	0.90 (0.10)	0.93 (0.08)	0.90 (0.08)
Resource rents per capita (ln)	0.78 (0.19)	0.88 (0.23)	1.02 (0.14)	1.02 (0.14)	1.06 (0.08)	1.06 (0.07)	1.05 (0.07)
Postwar periods	48	48	113	113	171	206	206
N	296	296	763	763	1,100	1,550	1,550
Notes	Matched sample	Matched sample			Data: R&A	Data: M	Data: combined

Note: Cox hazard ratios with robust standard errors in parentheses. \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$ .

sides, and there are also practical difficulties of monitoring multiple groups.

The results of these analyses are presented in Table 5 and suggest that PMSC involvement is particularly damaging for postwar stability even when we control for the presence of multiple other actors. Our previously identified relationship between PMSCs and recurrence remains statistically significant across all models, whereas the effects of the presence of other forces are largely statistically insignificant. Looking more closely at the relationship (see the online appendix), the conflict context with postwar risks most similar to those created by the use of PMSCs is when multiple rebel groups have been active in a war, suggesting that uncertainty is caused by a combination of difficulty of monitoring and inability of processing information about multiple actors. This insight could apply to PMSCs as well, considering the ever-changing nature of the private security market.

### Robustness

Our results are robust to various alternative model specifications and design choices. In Table 6 we report a few of these specifications, probing in greater detail possible confounders relating to contestation (Models 13–14), PMSC presence in the postwar period (Models 15–16), and the geographical scope conditions of the study (Models 17–19). The negative

effect of PMSC use on peace duration remains largely similar throughout, providing support for our substantive results.

The first aspect we investigate is whether PMSCs are deployed into more challenging contexts for the creation of a stable peace, such as when the warring sides' military capacities are largely balanced. We constructed a control variable on interparty strength as a function of rebel troop size in relation to government military spending.<sup>85</sup> A descriptive analysis of this variable reveals that the mean size of rebels in relation to government forces is indeed greater in cases when PMSCs are used, but the variation is large and the difference not statistically significant. Due to missing data on rebel troop size we lose observations when controlling for this aspect, meaning that we rely on the matched sample that provides the best comparison across cases. Models 13 and 14 show that our results are robust for the inclusion of this variable, and that rebel-governmental "parity" by itself is actually correlated with longer peace duration, although this relationship is not statistically significant at standard levels. One possible explanation for this result is that wars with larger rebel armies use conventional rather than irregular tactics in war, and that such warfare reveals more information about interparty strength. It would also lead to a postwar environment where the belligerents have similar forces to demobilize, which may make this process more transparent with a lower risk of recurrence.

The next aspect that may influence the risk of recurrence is whether PMSCs or mercenaries remain active in the postwar society. Qualitative accounts show that when such commercial interests have gained a foothold in a society, this often leads to a proliferation of similar "franchises, joint ventures and spin-off firms created in the wake of [big international PMSC] operations."<sup>86</sup> Such fragmentation of security provision is the antithesis of many postwar efforts to reinstate effective and accountable authority of the state. Indeed, the proliferation of armed militias not only increases the risk of civil war recurrence but also criminality, postwar violence, and even conflict and violence spillover to other countries.<sup>87</sup> Models 15 and 16 in Table 6 include information about the presence of PMSCs in the postwar period and the risk of civil war recurrence. Though our main results from the article remain robust for this specification, we do not find a statistically significant correlation between postwar presence and peace duration. This shows again that it may not be the activities of the PMSCs themselves that are responsible for a resumption of war—especially as

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<sup>85</sup>Data on rebel strength from Kreutz, "New Rebels in Postconflict Settings"; data on government strength from the Stockholm International Peace Research Institute, SIPRI Military Expenditure Database, <https://www.sipri.org/databases/milex>.

<sup>86</sup>Leander, *Market for Force and Public Security*, 614.

<sup>87</sup>Corinne Bara, "Legacies of Violence: Conflict-Specific Capital and the Postconflict Diffusion of Civil War," *Journal of Conflict Resolution* 62, no. 9 (October 2018): 1991–2016.

PMSCs in postwar contexts are used for different tasks than combat—but the impact their use has during the final stages of war on the credible commitment problem.

The final test we conduct is to address whether PSED's limited geographical scope (Africa, Latin America, and Southeast Asia) biases the results, and ask whether our findings are generalizable beyond this sample. An analysis of the conflicts included in our sample and those in other regions does not reveal any systematic difference regarding the general risk of recurrence (see the online appendix). Moreover, PSED is the only data source that contains information of sufficient detail to test our hypotheses about PMSC temporality and visibility, but we present replications of our basic model (Table 4; Model 1) on PMSC presence using other data sources in Table 6. In Model 17 we use global data from Elizabeth Radziszewski and Seden Akcinaroglu covering the years 1990–2008 that have a narrower definition of PMSCs.<sup>88</sup> Specifically, the data cover only PMSCs employed by the government, and are primarily concerned with PMSC training. Although this is a less valid measurement for our argument on the deployment of PMSC in combat, the negative effect on peace duration persists but not at a conventional significance level. In Model 18, we use global data from David Malet that focuses on foreigners fighting only on the rebel side, but this data may be too inclusive, as it does not differentiate between commercial and ideologically motivated forces.<sup>89</sup> Replicating our main model with this data, the results are similar to those in our main analysis. Model 19, finally, combines information from the different datasets (PSED when possible, Radziszewski and Akcinaroglu, as well as Malet for other regions) and constitutes the best approximation of a global test of our argument. This test shows that the risk of recurrence is greater for conflicts where PMSCs have been deployed during war. Taken together, these investigations are consistent with our argument that when auxiliary forces based outside the local context have been involved in fighting, then the credible commitment problem in the postwar society is exacerbated.<sup>90</sup>

### Peacemaking in the Shadow of Mercenaries

What are the long-term effects of using PMSCs and mercenaries in civil conflict? Does the availability of commercial specialized actors offer the possibility to “write a check and end a war,” as Doug Brooks claimed,<sup>91</sup>

<sup>88</sup>Radziszewski and Akcinaroglu, “Private Military & Security Companies, Conflict Complexity, and Peace Duration.”

<sup>89</sup>Malet, *Foreign Fighters*.

<sup>90</sup>The online appendix presents further discussion on the differences in the data, as well as additional specifications and models.

<sup>91</sup>Brooks, “Write a Cheque, End a War.”

and avoid the problems of reintegrating ex-combatants into the same society? We posit that even if PMSCs can have a substantial impact on the battlefield that may end wars faster, the legacy of their deployment will exacerbate parties' distrust in each other and create a less predictable postwar environment wherein the risk of recurrence is greater. Our results from a statistical analysis of civil war recurrences between 1989 and 2014 show robust support for our predictions and provide a variety of contributions.

First, there is little systemic empirical research on commercial security actors as combatants in civil conflicts, as most studies have focused on these actors' role as instructors of local forces. Our analysis advances this literature by focusing specifically on the use of PMSCs for combat, which constitutes both the most visible and controversial use of such forces.<sup>92</sup> We argue that the legacy of having used auxiliary forces during combat creates a postwar situation where the former warring sides will be wary that they may be used again in the future, especially since PMSCs cannot be monitored or demobilized as part of confidence-building measures. This is relevant for the literature on the challenges of stabilizing a postwar society. Our results about how the potential risk of redeployment of PMSCs has a pernicious effect on peace are coherent with scholarship on the effect of other types of auxiliary forces not formally part of the warring factions, such as militias, external interveners, or foreign volunteers. What this article shows, however, is that PMSCs or mercenaries are particularly difficult to monitor, as they can remain mobilized while waiting for their next contract and are prepared to deploy without political approval or integration with local troops. In Croatia, for instance, the Serb breakaway region of Krajina hired a newly formed private security company—the Scorpions—to protect oil fields at Deltovci after the UN-brokered peace agreement in 1992.<sup>93</sup> Though the existence of this company, excluded from both the demilitarization process and not monitored by UN peacekeepers, cannot be held as the cause for conflict resumption two years later, analysts agree that the high levels of distrust between the parties made a long-term negotiated solution unlikely.<sup>94</sup> When fighting resumed, the Scorpions immediately

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<sup>92</sup>Tkach, "Private Military and Security Companies, Corporate Structure, and Levels of Violence in Iraq"; Marten, "Russia's Use of Semi-State Security Forces."

<sup>93</sup>Samuel Tanner and Massimiliano Mulone, "Private Security and Armed Conflict: A Case Study of the Scorpions during the Mass Killings in Former Yugoslavia," *British Journal of Criminology* 53, no. 1 (January 2013): 41–58.

<sup>94</sup>David Rieff, "The Krajina War: Endgame for the United Nations," *World Policy Journal* 12, no. 3 (Fall 1995): 71–74; John Ashbrook and Spencer D. Bakich, "Storming to Partition: Croatia, the United States, and Krajina in the Yugoslav War," *Small Wars & Insurgencies* 21, no. 4 (2010): 537–60. Note also that since this private security company only emerged after the end of the previous conflict episode, it is not included in our statistical analysis even though it has been noted that the Croatian government used a PMSC to train their forces in preparation for the recurrence. See Faulkner, "Buying Peace?"

became part of the Krajina forces and reportedly participated in human rights atrocities during the final phase of the war.

Second, our findings suggest that warring sides are constantly updating their expectations about each other and, as part of this process, prioritize the most recently available information. This provides an important detail that can help nuance and advance our understanding of bargaining in armed conflict, where the literature often assumes that information sharing is an exponential function of conflict duration or battle intensity. This study thereby contributes to a growing literature exploring how information can have different short-term and long-term effects on war dynamics. Recently acquired information may compel warring sides to seek negotiations, shift fighting to other geographic areas, or increase human rights violations.<sup>95</sup> Our analysis provides compelling evidence that what happens in the last year of a conflict has a stronger different effect on the postwar society than what has happened previously, suggesting that future research may wish to explicitly account for this temporal dynamic. It also provides useful knowledge for policymakers, as this indicates that the withdrawal of PMSCs or mercenaries before fighting ends may be a signal from warring sides of greater commitment to the renunciation of violence. The cancellation of a commercial military contract did, for example, contribute to the beginning of a peace process in Papua New Guinea in 1997. At the beginning of that year, local media reported that the government had contacted the British security company Sandline International to fight the separatist insurgency on the island of Bougainville. Before these mercenaries were deployed, however, there was widespread criticism of the plan by the political opposition, as well as from within the domestic military, and the contract was canceled.<sup>96</sup> In the aftermath of this scandal, several confidence-building measures were agreed to, including a truce in 1997 that became a ceasefire a year later, which was monitored by an unarmed regional monitoring body (1997–2003) and a UN political office (1998–2005), culminating in a 2001 settlement and a subsequent lasting peace.<sup>97</sup>

Third, this article provides an empirical contribution by linking the presence of commercial security actors—sourced from PSED—to armed conflicts as identified by the UCDP-PRIO armed conflict data. In doing so, we also introduce a useful definition for future studies about what types of

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<sup>95</sup>Christopher M. Sullivan, Cyanne E. Loyle, and Christian Davenport, “The Coercive Weight of the Past: Temporal Dependence and the Conflict-Repression Nexus in the Northern Ireland ‘Troubles,’” *International Interactions* 38, no. 4 (2012): 426–42; J. Michael Greig, “Rebels at the Gates: Civil War Battle Locations, Movement, and Openings for Diplomacy,” *International Studies Quarterly* 59, no. 4 (December 2015): 680–93; Hinkkainen and Kreutz, “Natural Resource Wars in the Shadow of the Future.”

<sup>96</sup>Sinclair Dinnen, “Militaristic Solutions in a Weak State: Internal Security, Private Contractors, and Political Leadership in Papua New Guinea,” *Contemporary Pacific* 11, no. 2 (Fall 1999): 279–303.

<sup>97</sup>Anthony Regan, “Bougainville, Papua New Guinea: Lessons from a Successful Peace Process,” *RUSI Journal* 163, no. 6 (2019): 44–54.

PMSC activities can be considered conflict-related and which ones may have other aims. Although our approach has focused on the conflicts that have terminated, this conceptualization and linking of data is similarly pertinent for ongoing conflicts such as those in Iraq, Afghanistan, Libya, and Syria. Disaggregating PMSC activities in conflict opens the door for future systematic scholarship on how these forces interact with both combatants and civilians in civil wars. Our article can also be seen as a first step in emphasizing the relevance of PMSCs in combat as a factor to consider in the general conflict literature in line with the visible real-life use of such forces in contemporary wars.

Finally, our results offer a guide for policymakers to understand the options at hand when dealing with PMSCs and mercenaries during and after a civil war. The presence of such forces should not be ignored or viewed merely as a commercial transaction but as an indicator of a particularly vulnerable postwar society. As several examples have shown, the negative influence of previous PMSC use has contributed to the resumption of conflicts where the international community has invested vast resources and expertise in ending a war. However, almost all conflict-management efforts are both in theory and practice focused on risks that emerge from within the warring sides or the local community, leaving concerns of external (re-)mobilization largely unchecked. Failing to acknowledge how these actors create uncertainty between warring sides even as a peace process is underway can lead to ineffective peacebuilding strategies. Considering the multitude of challenges for postwar societies, and the terrible consequences of a derailed peace process and resumption of war, all aspects that contribute to instability need to be addressed. The deployment of PMSCs or mercenaries is contributing to violence in long-running conflicts in Afghanistan, the Central African Republic, Iraq, Libya, Nigeria, Syria, and Ukraine, and their use is increasing.<sup>98</sup> Our findings suggest that this practice is likely to create less stable postwar societies with a greater risk of recurrence.

## Acknowledgments

For valuable feedback, we thank Kristian Skrede Gleditsch and Bethany Ann Lacina, as well as the participants of the Armed Commercial Actors in Civil Wars workshop organized by Ulrich Petersohn and Nicholas Lees (University of Liverpool), and the 2019 Annual Convention of the International Studies Association in Toronto, Canada.

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<sup>98</sup>Iveta Hloučková, "Countering Terrorism in the Shadows: The Role of Private Security and Military Companies," *Security & Defence Quarterly* 31, no. 4 (2020): 155–69.

## Data availability statement

The data and materials that support the findings of this study are available in the *Security Studies* Dataverse at <https://doi.org/10.7910/DVN/XXR0Z2>.

## Funding

Corinne Bara acknowledges funding from the Swedish Research Council [project number 2020-03936]. Joakim Kreutz acknowledges funding from the Swedish Research Council [project numbers 2016-05734 and 2020-02368].