

## 4 How to curb conflict

### Policy lessons from the economic literature

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#### **Introduction**

While the lion's share of the contributions to this volume on instruments and tools for conflict prevention focus on concrete insights from specific cases and situations, often involving specific policies from China or Switzerland, this chapter takes a step back and offers a survey of statistical results from large-*n* studies published in economics and political science. Both approaches are useful and complementary, as case studies take particularly well into account concrete and specific features of the context, while an advantage of large-scale statistical studies is that they contain large, well-defined, and comprehensive control groups which allows us to draw general lessons from policies applied elsewhere that may have not received enough attention in other contexts. To give a concrete example, one of the many studies discussed below is about the impact of school construction in Indonesia on the likelihood of political violence (Rohner and Saia). This study finds a very strong pacifying impact from fostering primary education. Obviously these insights cannot be simply blindly applied to other contexts that may be very different from Indonesia. Still, the mechanisms highlighted in this work may well apply beyond Indonesia, and provide inspiration for (maybe smaller scale) pilot projects elsewhere.

Below, I offer a summary of some recent statistical results on peace and war in economics and political science, before highlighting more concretely, towards the end of the essay, how these findings could inspire governments and policy makers. This chapter starts briefly outlining why we should care about tackling turmoil: conflicts are very costly from both a human and socio-economic point of view. After this short discussion of motivation, the emphasis will, second, shift to a few major root causes of fighting, namely poverty, natural resources, and ethnic division. Armed with this overview, the third and final part of

this short discussion will then focus on potential medications to cure the ills of political violence.<sup>2</sup>

### **Costs of conflict**

Like the causes, the costs of conflict are manifold, ranging from fatalities over economic costs to societal damage. The maybe most immediate concern and easiest cost to grasp is in terms of human suffering. According to Bae and Ott, the conflict-related deaths in the 20th century were as large as 109.7 million, corresponding to 4.35 percent of the world population. Of these, 60 percent were civilian non-combatants. Hopes that the end of World War II were to give way to a new age of perpetual peace were swiftly dashed: between 1945 and the end of the 20th century, an estimated 3.3 million people lost their lives in 25 interstate wars, while an estimated 16.2 million people perished in 127 civil wars (Fearon and Laitin), and much violence also occurs away from the battlefield, when armed troops turn their weapons against civilians. Since World War II, some 50 episodes of mass killings have led to between 12 and 25 million civilian casualties (Political Instability Task Force).<sup>3</sup>

Also, the economy of a war-torn country gets damaged in various ways. Not only does destruction of physical infrastructure entail a high toll, but also days spent fighting correspond to a loss of productive labor. Unsurprisingly, the economic costs of conflict are sizable by any standard. Collier estimates an average war to reduce annual economic growth by 2.3 percentage points, leading to a total loss of 15 percent of GDP for the average war duration of 7 years. Even conflicts with a below-average death toll, like the separatist fight in Basque Country, can lead to very sizable economic consequences. According to Abadie and Gardeazabal, the comparison of the Basque GDP to a synthetic control group of comparable regions with similar characteristics but without violence, leads to the conclusion that Basque GDP would be about 10% higher today in the absence of ETA's armed fight.

Finally, conflict also imposes costs on the society. While the literature has found a clear-cut effect of conflict exposure during childhood in reducing human capital accumulation (e.g. Shemyakina; Swee) and in increasing future crime propensity (Couttenier et al.), the impact of conflict on social capital is more controversial (see e.g. the survey of Bauer et al.). While some studies have found that conflict depletes trust and boosts ethnic identity (e.g. Cassar et al.; Rohner et al. "Seeds of Distrust"), other studies have also found beneficial effects, in particular on increased local collective action (e.g. Blattman; Bellows and Miguel).

## **Causes of conflict**

Three prominent root causes of political violence have received considerable attention in economics and political science in recent years: poverty, natural resource abundance, and ethnic heterogeneity.

The conceptual reason for the emphasis on poverty as a potential driver of conflict is simple: having a limited amount of time available, people have to choose how to spend it and face an opportunity cost of all options not selected. Concretely, joining a rebel group means giving up work. While the opportunity cost of leaving the work force is low when jobs and perspectives are lacking, it is very high for individuals with large human capital and well-paid jobs. Put differently: it is much easier to recruit fighters in a weak economy. There is indeed a large literature finding that poverty is a powerful correlate of conflict (Fearon and Laitin; Miguel et al.; Collier and Hoeffler; Collier et al.).

A second major factor that has been often investigated as a root cause for conflict is the abundance of natural resources, which represent rents that can be grabbed and a higher price for appropriation. Other mechanisms put forward in the literature include the fact that natural resources may fuel secessionism, that the need of capital for resource extraction may crowd out labor intensive sectors and hence lead to lower wages, or that the control of mines and oil wells makes the financing of rebellion more easily feasible. A variety of articles have documented a strong link between natural resources and conflict, including, among many others, Fearon and Laitin; Collier and Hoeffler; Dube and Vargas; Lei and Michaels; Caselli et al.; Morelli and Rohner; Esteban et al. “Strategic Mass Killings”; and Nicolas Berman et al.

A third often-cited factor is the role of ethnic diversity. One underlying conceptual logic is the idea that ethnicity can be a powerful marker for collective action (see e.g. the theoretical papers of Esteban and Ray; Caselli and Coleman). A variety of statistical studies have found that ethnic polarization goes along with a greater likelihood of civil conflict (Montalvo and Reynal-Querol; Esteban et al. “Ethnicity and Conflict”).

## **Policies for peace**

While there is no consensus in the economics of conflict literature on what the key policies are to stop political violence, there are a selection of policies and institutions that appear promising in the light of the empirical evidence. We can group these into four categories: stability; incentives; institutions; and trust.

First, as far as *stability* is concerned, there has been documented the importance of state capacity (Besley and Persson), and in particular the crucial role of establishing security and functioning public service provision (Eli Berman et al.). Second, what has been found to boost *incentives* for peaceful behavior are factors that make the economy strong and that provide jobs and long-run perspectives for prosperity. In particular, education is found to reduce the scope for conflict (Collier and Hoeffler; Thyne; de la Brière et al.; Rohner and Saia), and employment programs and job market access are pointed out as major factors that attenuate the incentives for violent behavior (Blattman and Annan; Couttenier et al.). Related to this are also the findings in Nicolas Berman et al., highlighting that by reducing the potential gains from victorious conflict, peaceful behavior can be promoted. In particular, they find that transparency on mineral origins and high levels of corporate social responsibility attenuate the conflict risk. Third, when it comes to the impact of *institutions*, several articles in the literature have highlighted the non-monotonic impact of democracy. It has been found that regimes with “intermediate” democracy levels face the largest conflict risk (Hegre et al.; Fearon and Laitin), and that democracy tends to reduce conflict in rich countries, while it may fuel conflict in poor states (Collier and Rohner). Two recent studies find a clear impact of full democracy and franchise extension reducing conflict (Laurent-Lucchetti et al.; Rohner and Saia). There exists also evidence for particular aspects of democracy. In particular, institutional constraints, the rule of law, proportional representation, and federalism correlate with having fewer civil wars (Easterly; Reynal-Querol; Saideman et al.; Besley and Persson), and power-sharing has been found to reduce the scope for fighting (Cederman et al.; Mueller and Rohner). Fourth, building *trust* has a variety of angles and aspects. While conceptually it is argued that taking measures that promote inter-group trust may boost inter-group trade and hence increase the opportunity cost of forgone trade in the case of conflict (Rohner et al. “War Signals”), the empirical evidence shows that reconciliation ceremonies (Cilliers et al.) and bilateral pacification of inter-group hostilities can reduce grievances and the scope for conflict (König et al.).

## **Conclusion**

Conflict costs are large by any standards, and directing research efforts at this topic are crucial. While the literature in conflict economics has gained an overview on major causes and consequences of armed fighting, up to recently the study of *how* particular policies can reduce conflict risks has been to a large extent neglected. In recent years,

however, a series of interesting results have been reached on how the scope for war can be reduced. Further research on this policy-relevant angle to the conflict question is strongly recommended.

In terms of real-world implications for international policy makers, there are plenty of implications to be drawn in the light of the evidence cited above, in terms of improving stability, incentives, institutions, and trust. To give just one example, education tending in general to be a pacifying force, global policy makers and governments may consider supporting international initiatives and programs – for example, by helping to fund further schooling. But on top of the aforementioned policies that are largely defined at a national level, there are also some inherently transnational policies that may be promising. Nicolas Berman et al. have, for example, found that transparency and certification initiatives for minerals extracted can reduce their potential scope for conflict. This is an example of a cause requiring broad international support and where policy makers and governments around the world can make a real difference through international cooperation.

## Notes

- 1 Dominic Rohner is grateful for helpful comments by Courtney Fung.
- 2 This current literature review essay draws on earlier survey papers of Rohner (“The Economics of Conflict and Peace”; “The Economics of Peace”). Given its short length, the focus is necessarily selective and the goal is to showcase some relevant recent work on the economics of conflict, without any claim for completeness.
- 3 Indirect casualties from epidemics and disease among the weakened populations cause at least as many fatalities as direct casualties (Ghobarah et al.). Beyond physical injuries and death, psychological effects of conflict exposure are widely documented (see e.g. Barenbaum et al.).

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