Nils Petter Gleditsch, Erik Melander, and Henrik Urdal: Chapter 1 Introduction—Patterns of Armed Conflict Since 1945

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Appendix with additional figures and tables

In this online appendix, we provide additional documentation for several of the points made in our chapter, including more detailed responses to points made by the editors and the referees.

How robust is the decline of war?

We first address the question of the robustness of the "decline-of-war" thesis as it pertains to the post–World War II period (figures A1–A4).

Figure A1. Annual battle deaths 1946–2008, HEs, BEs, and LEs from PRIO data

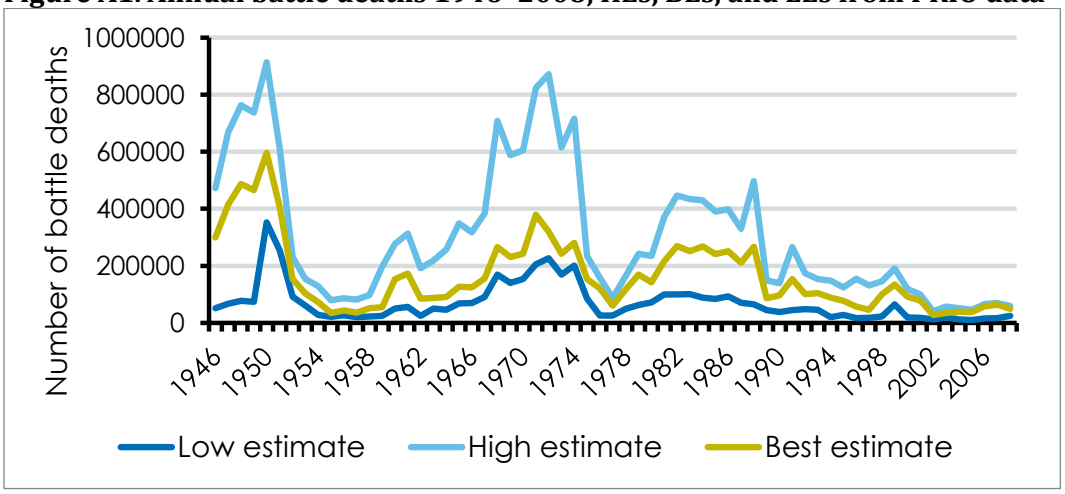


Figure A1 shows that the "decline of war" in the PRIO battle deaths data is robust to the measure used (high, low, or best estimate).

Figure A2. Annual battle deaths 1946–2007 from COW data

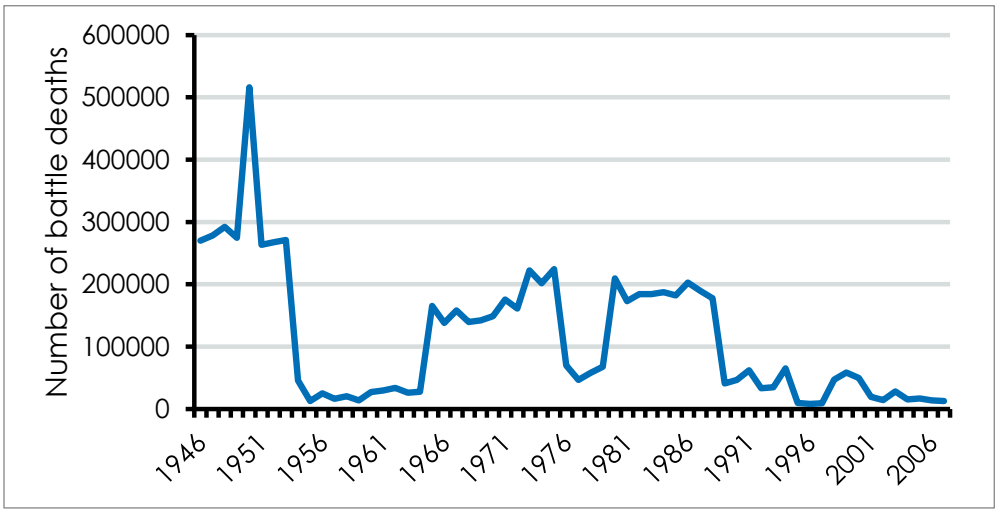


Figure A2 shows the decline of war in terms of annual battle deaths from the most recent COW dataset. The pattern over time is quite similar to that found in the UCDP data.

Figure A3. Annual battle deaths 1946–2007 from the COW data, by type of war

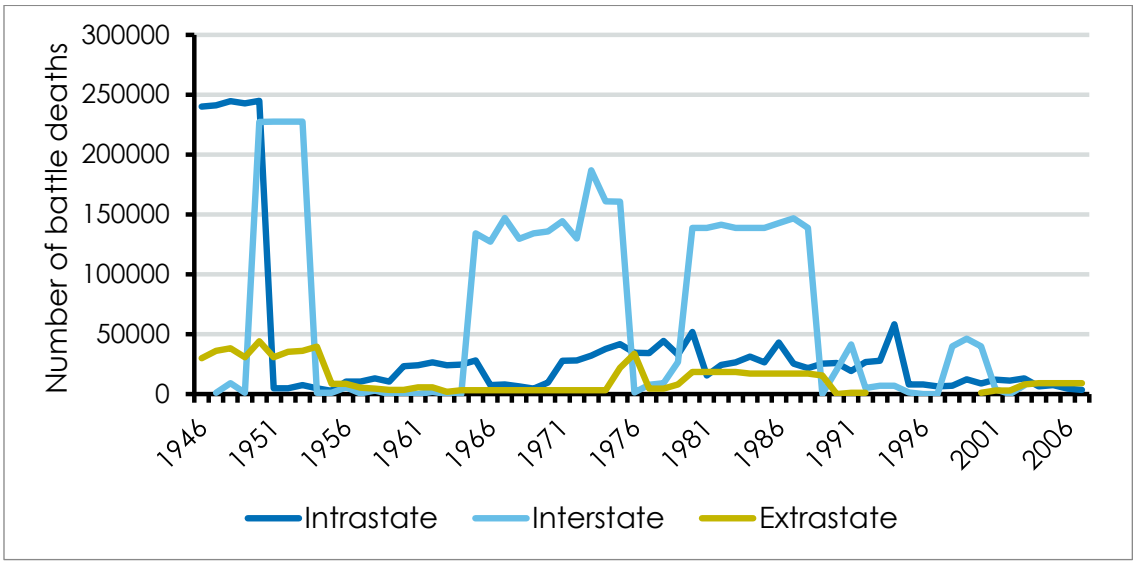


Figure A3 shows the decline of war as measured by the COW data for each of the three types of war. For interstate war and extrastate war, the decline is progressive over the whole period. For intrastate war there is an all-time high at the beginning of the period (the Greek and Chinese Civil Wars), then a sharp decline and a long increase until a little beyond the end of the Cold War, and then a sharp decline.

Figure A4. Annual battle deaths in intrastate conflict 1946–2007, PRIO and UCDP data

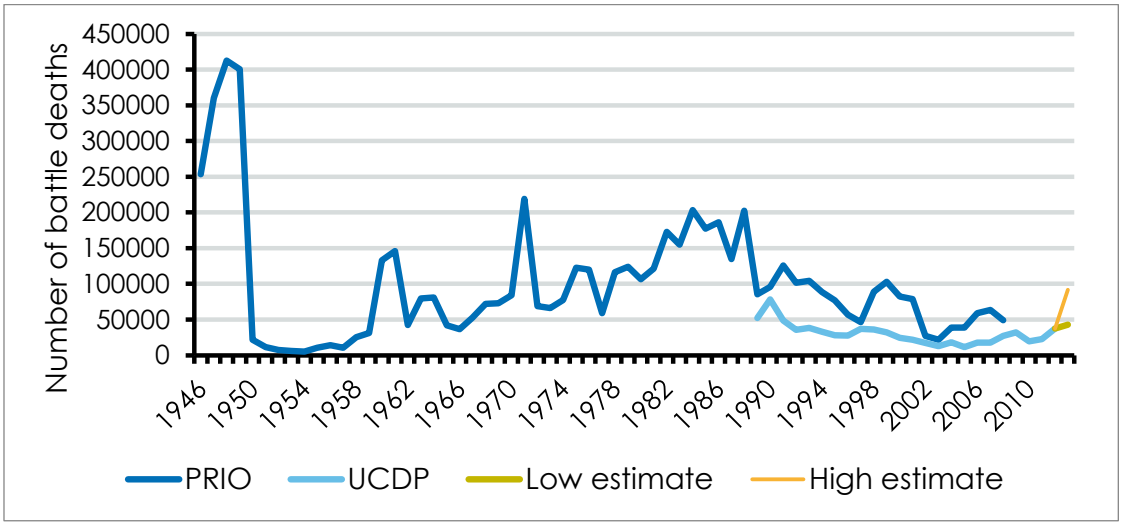


Figure A4 shows the development of war severity for intrastate wars in the PRIO and UCDP databases. The immediate post–World War II years saw two of the bloodiest civil wars: in China 1946–1949 (1,200,000 battle related deaths) and Greece 1946–1949 (154,000). In the period after the Korean War, when all armed conflict activity was at a minimum, civil war severity declined sharply. Then it arose through most of the Cold War and a little beyond. In the post–Cold War era,

civil war severity declined markedly. The recent rise (notably due to the Syrian civil war) has not brought severity to the highest levels of the Cold War, not to speak of the level of the late 1940s.

Figure A5. Annual battle deaths 1946–2013 relative to world population, PRIO and UCDP data

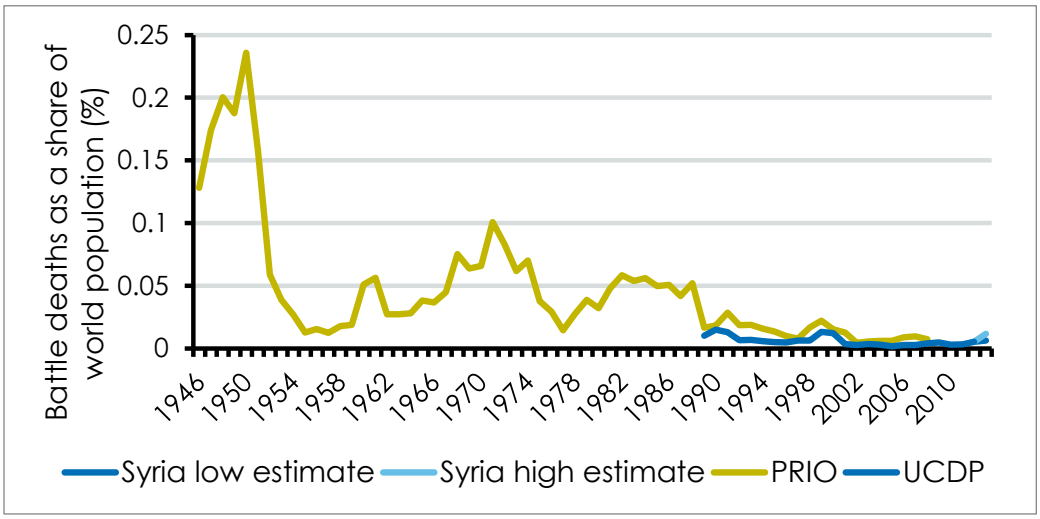


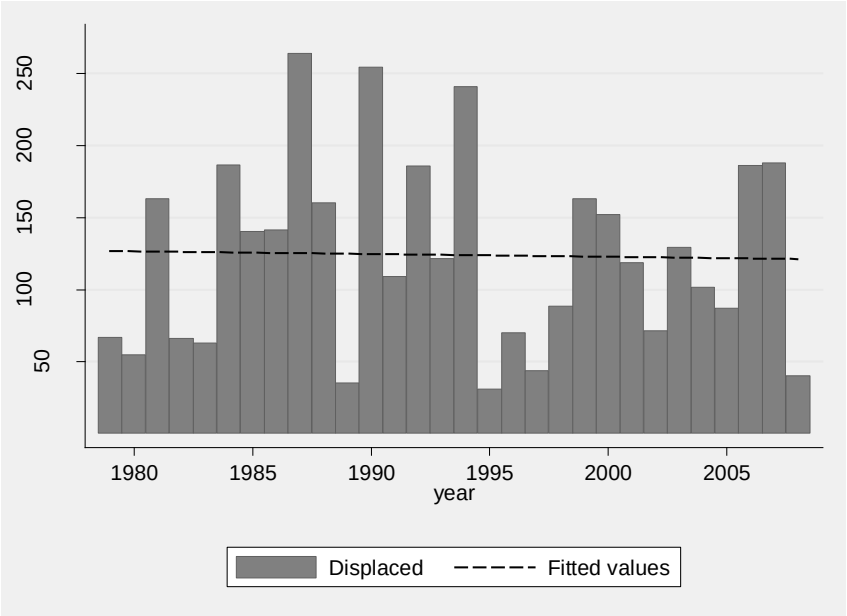
Figure A4 shows the decline of war as measured by annual battle deaths relative to world population for that year. The population data are from UN World Population Prospects (2013). Here, the decline of war is steeper than in the previous figures using absolute numbers of battle deaths.

Overall, we find robust support for the "waning of war" argument, regardless of the source of the data (PRIO, UCDP, or COW), the type of war (extrastate, interstate, or intrastate), or the measure used (absolute vs. relative figures).

Forced displacement and civil conflict

Figure A.6 updates a figure in Melander, Öberg, and Hall (2009) and shows that there is no need to revise their conclusion that there is no evident trend in average levels of forced displacement in civil conflict

Figure A.6. Average forced displacement in civil conflict, 1979–2008



Battle deaths vs. war deaths

(These sections were eliminated from the chapter due to lack of space.)

Some discussion over the intensity of conflict and the decline in conflict violence has arisen from the use of different data sources. While the UCDP and PRIO battle deaths estimates are based on a wide selection of secondary sources, some estimates of conflict casualties, mostly focusing on individual conflicts or countries, have relied on survey data. In a larger comparison of 13 conflicts between 1955 and 2002, Obermeyer et al. (2008) used WHO mortality survey data to estimate the number of violent war deaths. Based on sibling data, the authors claimed that the PRIO battle deaths data underestimated overall war deaths by a factor of three, and challenged the notion of a declining trend in the severity of war. Spagat et al. (2009) argue that the discrepancy between the two approaches is primarily due to differences in the definition of war deaths, but also that Obermeyer et al. (2008) have excluded conflicts where the reported sibling war deaths are low, leading to a potentially biased sample.

Another controversy arose over surveys collected in Iraq after the 2003 US-led invasion. In an article in *The Lancet,* Burnham et al. (2006) claimed that more than 600,000 violent deaths had occurred in the 39 months following the invasion. However, as shown, there are major biases in the Burnham et al. estimate, one arising from the sampling of residential streets that are crossing the main street, leading to the oversampling of households that are particularly exposed to violence. A follow-up survey involving Burnham among the authors (Hagopian et al. 2013) reports violent deaths that are much more in line with other surveys and the Iraq Body Count, which bases its estimates on news reports.

One of the most controversial attempts to assess the overall human consequences of war involves the civil war in the Democratic Republic of Congo (DRC). The International Rescue Committee (IRC) carried out five retrospective mortality surveys in the DRC between 1998 and 2007. Following the fifth survey, the IRC concluded that a total of 5.4 million people had died as a consequence of the war, with more than 90% being victims of disease, malnutrition, and other non-violent causes. However, in a review of the IRC estimates the *Human Security Report* 2009/2010 (Mack 2010) argues that the IRC numbers are subject to several flaws, including an underestimated estimate of mortality before the war, an exaggerated mortality during the war, and an inappropriate selection of the survey locations for the first two surveys. When recalculating the IRC numbers with more plausible

assumptions, the *Human Security Report* finds that the best estimate of the excess death toll shrinks to less than one third.

References

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