CHAPTER 4

War Is Not "Development in Reverse": The Impact of Conflict on Children's Education

This chapter continues the investigation of the impact of war on human development that began with the last *Human Security Report*. Part II of that *Report*, "The Shrinking Costs of War," analyzed the apparent paradox of child mortality rates that decline in wartime.

In the first three chapters of this *Report*, we argued, among other things, that the impact of war on the worldwide incidence of sexual violence has likely declined since the end of the Cold War.

In this final chapter we focus on how conflict affects children's education and find a similar counterintuitive pattern—a development indicator that again appears to *improve* during many periods of warfare.

It is certainly the case that wars can have hugely damaging impacts on entire educational systems. Indeed, major reports have described the overall impact of war on educational systems as highly damaging, even "devastating,"[258] "disastrous,"[259] and causing the destruction of educational opportunities on "an epic scale."[260]

But this is not the case for most countries, most of the time. Indeed, Paul Collier's memorable phrase, war is "development in reverse," is not an accurate description of the impact of war on educational outcomes.[261] Data from a major 2011 study of 25 countries by UNESCO's Institute for Statistics show that during the majority of conflict periods there is no clear decline in educational outcomes.[262]

In fact, the indicators used in the study show educational outcomes *improving* during a substantial number of conflict periods. An analysis by the Washington, DC-based Education Policy and Data Center (EPDC), released in 2010, found that many conflict-affected countries

experienced improving educational outcomes, even in the regions *worst affected* by conflict.[263] Both studies are reviewed later in this chapter.

The fact that on average educational outcomes improve in wartime does not mean that conflict has *no* impact. The impact may be evident in a slowing of the rate of improvement in educational attainments that prevailed in the pre-war situation.

But there is an important difference between wartime situations in which nationwide educational attainments decline *absolutely*, and those in which they continue to improve, albeit at a slower rate than in peacetime.

In both cases, war has an impact, but in the latter case the societal effect of conflict on educational outcomes—i.e., a slower average rate of improvement—can hardly be described as "devastating" or "disastrous" in national terms.

The finding that conflict has a less dramatic impact on educational outcomes than is claimed in the literature is similar to that on child mortality in wartime that was analyzed in the last *Human Security Report*. In the latter case, we found that in approximately 90 percent of the years in which countries around the world experienced high-intensity conflicts between 1970 and 2008, under-five mortality rates declined between the beginning and the end of the conflict.[264] The evidence suggests that educational outcomes in most wars follow a similar trend.

The claim that both child health and educational outcomes appear to improve during periods of conflict is profoundly counterintuitive—indeed, it may suggest that war is good for children's health and education. This is, of course, not the case.

The reality is that in most developing countries there is a strong, though far from universal, tendency for educational attainments and children's health outcomes to improve in peacetime, and the evidence suggests that these benign trends continue during many periods of conflict, in large part because very few of today's wars are deadly or destructive enough to reverse them.

Another possible explanation is that war *does* have the expected negative impact but that this is more than counterbalanced by other factors. In Afghanistan, for example, a dramatic improvement in school enrolments followed a massive infusion of international assistance to the educational sector after the overthrow of the Taliban in 2001, despite the ongoing insurgency.

This pattern—of development outcomes improving during periods of warfare—is true not only for child health and education. A recent cross-national statistical study undertaken for the World Bank's 2011 *World Development Report* examined the impact of war on progress towards achieving the Millennium Development Goals (MDGs).

It found that, on average, indicators for malnutrition, life expectancy, infant and maternal mortality—and access to sanitation and potable water—all improved in war-affected countries.[265]

These positive findings have received little publicity, however. Indeed, the fact that student educational attainment and attendance rates often improve in wartime is rarely even mentioned in the major reports on education in the developing world that are produced by international agencies like UNESCO and UNICEF (United Nations Children's Fund), by advocacy groups, and many researchers. In what we refer to as "mainstream narrative," the focus is on the worst affected countries where the damage to educational systems has been greatest.

Our Focus

In reviewing the impact of war on children's education, we examine three different approaches to describing and explaining it.

First, we examine the detailed and contextually rich case-study literature that provides much of the material that informs the mainstream narrative on the many ways in which conflict can affect educational systems.

Second, we examine two recent studies that use comparative descriptive statistics to examine the relationship between conflict and education. Both were undertaken for UNESCO's flagship 2011 Education for All report, *The Hidden Crisis: Armed Conflict and Education*.[266]

Third, we review the findings of the very small number of econometric analyses of the impact of war on education, notably the major background study undertaken by the Peace Research Institute Oslo (PRIO) for the World Bank's 2011 *World Development Report*.[267]

Each of these approaches provides different insights. The country case-study material that informs the mainstream narrative provides a deep, contextualized understanding of the very different impacts of conflict in particular countries at different times. Indeed, most of what we know about how war affects educational systems comes from the country case-study research that we discuss below.

However, the mainstream narrative that derives from this rich case-study literature suffers from selection bias in that it focuses—understandably enough—on the worst cases where the need for resources is greatest. It devotes little attention to countries where war appears to have little impact on educational attainments—or to asking why this might be the case. Yet, understanding how and why educational outcomes can continue to improve in periods of conflict is of obvious policy relevance.

The multi-country descriptive statistics studies we examine here derive their educational data primarily from nationwide population surveys, mostly UNICEF's Multiple Indicator Cluster Surveys (MICS) and those of the Demographic and Health Survey (DHS) organization. Because these surveys use similar methodologies, their findings can be compared cross-nationally.

The background research undertaken by the Montreal-based UNESCO Institute for Statistics (UIS) for UNESCO's 2011 *Hidden Crisis: Armed Conflict and Education* report, and examined in detail below, uses descriptive statistics to reveal how educational attainments within countries may vary:[268]

- Between periods of war and peace.
- Between genders and between levels of income.
- Between areas of war-affected countries that are directly affected by conflict and those that are not.

The second comparative study examined here was undertaken for the same UNESCO report by EPDC. It focuses on the impact of armed conflict on school attendance and enrolment rates and other educational indicators at the subnational level in some 19 different countries.

In particular, it compares educational outcomes in regions of a country that were the worst affected by conflict with all other regions—where conflict had less impact.

Both studies analyze a limited number of the countries in conflict around the world during the periods that are covered. For this reason, and because the samples of countries examined are not randomly selected, we cannot be confident that their findings, while striking and suggestive, are necessarily representative of the impact of conflict on educational attainments and attendance in *all* war-affected countries.

Econometric studies on the impact of war on educational systems—like that undertaken by PRIO for the World Bank's 2011 *World Development Report*—avoid the possibility of unintended selection bias noted above by including virtually all countries in conflict over a given period.[269] Plus, regression analysis enables researchers to examine the association between possible causal factors—such as conflict—and educational outcomes while holding other factors (e.g., income) constant.[270]

Econometric studies that use all available cases of the phenomenon being studied— or a representative sample—can in theory be used to make generalizations about average impacts of conflict on education. Individual, or a series of, case studies and analyses that use descriptive statistics to compare limited numbers of countries that have not been selected randomly cannot be used to make such generalizations. But, as we pointed out in Chapter 2 of the previous *Human Security Report*, econometric analysis confronts its own theoretical and methodological challenges.

Case-study, comparative descriptive statistics, and econometric approaches to explaining the impact of war on children's education all have limitations, as this chapter makes clear. But drawing on the findings and insights of all three provides us with a deeper understanding of the war and education nexus than relying on any single approach on its own.

The Mainstream Narrative

As noted previously, we use the term, "mainstream narrative" as a shorthand way of referring to how issues are framed, perceived, and explained. It refers to the assumptions that international agencies, donor governments, and major NGOs (nongovernmental organizations) share with respect to the negative impacts of armed conflict on children's educational opportunities.

UNESCO's 2011 report, *The Hidden Crisis: Armed Conflict and Education*, provides the most compelling recent iteration of the mainstream narrative. Drawing on a wide range of research resources, it provides a comprehensive overview of the many different ways in which conflict adversely affects children's schooling. Its research leads it to conclude that "the 'scourge of warfare' … is destroying opportunities for education on an epic scale."[271]

The mainstream narrative is informed in considerable part by the detailed, and often evocative, descriptions of the ways in which war can affect children's education. These accounts are frequently buttressed with statistics from individual country case studies—for example, the percentage of schools destroyed during a period of warfare.[272]

The cumulative impression created by these detailed investigations does indeed suggest that war destroys educational opportunities on "an epic scale."

Nine Ways That War Affects Children's Education

First, and most obviously, war kills children, and injures others so seriously they cannot attend school. As we pointed out in Chapter 3, the frequently cited figures indicating that 6 million children were disabled and seriously injured and a further 2 million killed in recent wars are of dubious provenance.[273] But no one doubts that the costs that conflict imposes on children can be extremely high.

Second, teachers may be killed, injured, or subject to forced displacement in wartime environments. More than two-thirds of Rwanda's primary and secondary school teachers reportedly fled or were killed as a result of the genocide.[274] In Cambodia's genocide, teachers, along with other "intellectuals," were specifically targeted by the Khmer Rouge regime.[275] In less extreme circumstances, teachers are still at risk of conscription by government or rebel forces, or of losing their jobs because of war-driven cuts in educational spending.

Third, children in war are often displaced to refugee or internally displaced person (IDP) camps. IDP camps, which tend to have a high concentration of children, typically have far fewer educational resources than refugee camps. Moreover, many children, particularly those who have lost homes, parents, and siblings, may be deeply traumatized by their experiences. The scope of the problem is evident in the sheer numbers of displaced children—an estimated 13.5 million around the world are internally displaced[276] plus several million refugee children.[277]

Fourth, armed conflict affects education indirectly, for example, through conflict-related sexual violence. Sexual violence against children can have, "a devastating impact on education: it impairs victims' learning potential, creates a climate of fear that keeps girls at home and leads to family breakdown that deprives children of a nurturing environment."[278]

Fifth, war can destroy or seriously damage schools and other educational institutions:

- In Iraq the Ministry of Education reported that there were 31,598 attacks on educational institutions between March 2003 and October 2008.[279]
- In Afghanistan the number of attacks on schools increased from 242 to 670 between 2007 and 2008.[280]
- In Thailand attacks on schools almost quadrupled between 2006 and 2007, rising from 43 to 164.[281]
- In Timor Leste 95 percent of schools had to be repaired or rebuilt after the violence that followed the independence referendum in 2000. In Iraq the figure was 85 percent; in Kosovo, 65 percent; in Bosnia-Herzegovina, 50 percent, and in Mozambique, 45 percent.[282]

School buildings that are not destroyed or badly damaged may be commandeered by government or rebel forces and used as headquarters, as barracks, for storage, or to house IDPs who have lost their homes.[283]

Sixth, parents affected by war-exacerbated poverty, and finding it difficult to pay school fees, may choose to take their children out of school and put them to work at home.

Seventh, child soldiers, who lose far more years of education than other children in war-affected countries, have special educational needs. These needs are rarely met.[284]

Eighth, in wartime, military budgets typically increase; educational budgets get cut. As a consequence, teachers go unpaid (causing many to quit), funding for teaching materials and routine maintenance of schools dries up, and system-wide management and development of educational systems degrades and sometimes grinds completely to a halt.[285]

Finally, warfare destroys human capital throughout the educational system. This is arguably an even greater challenge than damaged and destroyed buildings.

In what follows, we focus on three indicators used to measure the impact of warfare on education—school enrolment, attendance, and pupils' educational attainment (i.e., average years of education). If the mainstream narrative is correct, we would expect the impact of conflict would be reflected in declines in all three indicators.

A One-Sided Picture?

The above descriptions are very similar to those in many—not all—major reports from international agencies and NGOs that have examined the various impacts of armed conflict on children's education. Indeed, many of the above examples are drawn from these reports, which in turn draw on the findings of a range of detailed case studies that have investigated what happens to educational systems in times of war.

No one doubts that the negative impacts that war imposes on education are shockingly large in some cases. But the problem with the mainstream narrative, as we saw in the case of sexual violence, is that the worst cases are presented in such a way as to suggest that they are the norm.

Thus, the descriptions of how teachers may be vulnerable to attack in wartime are illustrated with reference to Cambodia, Iraq, Rwanda, and Afghanistan—four countries that have endured some of the deadliest wars in the past 40 years.

The references to the wartime destruction of school buildings are to Timor Leste, Iraq, Kosovo, Bosnia, and Mozambique—all countries in which the destruction of educational property was severe.

References to the impact of sexual violence on education are drawn from the Democratic Republic of the Congo (DRC), which, as we pointed out in Chapter 1, has been afflicted by extraordinarily high rates of wartime rape.

The strong tendency in most major reports to describe impacts of armed conflicts on educational systems in worst-case terms is no accident. What we are seeing here is essentially the same phenomenon we examined in looking at the impact of war on sexual violence. The international organizations and NGOs whose work is discussed above are not simply involved in reporting and analyzing the impact of war. They are also committed to trying to protect both children and their opportunities to be educated in war-affected countries.

These agencies and NGOs have every reason to seek greater international support for the underfunded educational needs of children in war-affected countries. The needs are great, and at the current rate of progress, the MDGs' education target—which calls for all children to have access to primary schooling by 2015—is unlikely to be met.[286]

So, it is also understandable that reporting concentrates on cases where the threats to education are greatest and the need for greater international assistance is most compelling. The consequence, however, is that the narrative of the impact of war on educational outcomes, like that on wartime sexual violence discussed in Chapters 1 and 2, becomes one-sided—biased by the strong focus on the worst cases. This, as we point out later, has important implications for policy.

One consequence of what might be called the "worst-case bias" in the mainstream narrative is that few nonspecialist readers of the major reports by UNESCO, other international agencies, or major NGOs will have any idea that there is compelling evidence to suggest that, on average, educational outcomes *improve* in conflict-affected countries.

There is another possible reason why the mainstream narrative overstates the impact of conflict on educational systems, namely a misunderstanding of current trends in armed conflict around the world.

As Oxford University's Julia Paulson and Jeremy Rappleye point out in a 2007 literature review of the relationships between education and conflict, many of the key studies—undertaken by education specialists rather than conflict researchers—are premised on the assumption that conflicts have been intensifying and increasing in frequency.[287] Clearly, if this were the case, it is likely that the threat to education would also be increasing. In fact, as this *Report* and others have made clear, the reverse is true: conflicts that are deadly and destructive enough to seriously affect educational outcomes have become much less frequent.

> It is understandable that reporting concentrates on cases where the threats to education are greatest and the need for assistance is most compelling.

Comparative Statistical Studies Reveal a Very Different Picture

To gain a rather different perspective on the impact of conflict on education, this section reviews the findings of a number of statistical studies on the effects of war on school enrolment, attendance, and attainment that use educational data drawn from population surveys.

The survey-based studies offer a more comprehensive picture of the extent of war's impact on education, because they draw on nationwide quantitative data rather than anecdotal accounts of particular impacts in particular countries—often in the worst affected areas. And the survey data reveal a very different picture from that depicted in the mainstream narrative.

The surveys on which the comparative statistics studies are based use similar definitions and methodologies that permit cross-national comparisons. (This practice stands in sharp contrast to the surveys on wartime sexual violence, which, as we pointed out in Chapter 1, often lack common definitions and methodologies, making cross-national comparisons difficult, if not impossible.)

All of the statistical studies reviewed here enrich our understanding of the variety of ways in which conflict affects education. Each offers a corrective to the bias inherent in the mainstream narrative.

The UNESCO Institute for Statistics

In 2011 the UIS produced a 25-nation comparative analysis of the impact of war on education. The study, which was commissioned for UNESCO's Hidden Crisis report, was entitled, *The Quantitative Impact of Conflict on Education*.

The UIS research team drew on the findings of nationwide population surveys undertaken in the new millennium in 25 war-affected countries. The aim was to provide a better understanding of the negative impact of conflict on educational attainments.[288]

The study drew attention to the many negative impacts of war on education in a careful review of the literature. But the most interesting fact to emerge from the cross-national data it reviews is that in a substantial proportion of cases in which the 25 countries it examined had experienced conflict since 1950, the indicators of educational attainment *were higher at the end of the conflict period than at the beginning*.[289]

Yet, this rather remarkable pattern is ignored in UNESCO's *Hidden Crisis* report, and, to the best of our knowledge, it is never mentioned in other reports on war and education that inform, and are in turn part of, the mainstream narrative.

> Data on the total number of years of education are rarely available in war-affected poor countries.

The methodology that the UIS researchers employed to detect the impact of war on education since the 1950s was ingenious. In the early post-World War II years, reliable government statistics on national educational attainments in developing countries were—at best—very rare. Absent official data, there were few other sources of information available—international population surveys, like those of the DHS, did not start collecting nationwide educational attainment data until the mid-1980s; MICS surveys did not start until the 1990s.

Although there are little or no survey data prior to the 1980s, each of the population surveys the UIS drew on had collected data on the total number of years of education that individual respondents attained. Such data are rarely available from other sources in war-affected poor countries.

Knowing the number of years of education that individuals have acquired in their lifetime, plus their age at the time of the survey, makes it possible to gain some idea of the years of education that successive cohorts of students may have lost due to warfare.

The UIS research team used educational attainment data from DHS and MICS surveys undertaken between 2000 and 2008.[290] The attainment measures used were the average number of years of formal education completed, or the percentage of the population that had received no formal education at all.

For some countries, data were collated to reveal differences in children's educational attainments depending on whether they lived in war-affected or non-war-affected regions of the country, or by gender, ethnicity, or wealth.

However, the DHS and MICS data do not provide a direct measure of the impact of conflict on education.

The survey data that the UIS analyzed are for the average number of years of education attained by different age cohorts in their lifetime (i.e., up to the time when the survey was undertaken). Primary and secondary education is normally completed by the age of 15. And so the UIS data show the average number of years

> The UIS data measure the total years of education attained during the lifetime of the respondent.

of education attained by all those individuals who were 15 years of age in a particular year. For example, the data for the year 1995 display the average number of years of education attained at the time of the survey by all respondents who were born in 1980.[291]

If the country in this example experienced conflict during, say, the first half of the 1990s, we would expect the data for the age cohort that turned 15 in 1995 to show lower educational attainments as a result of the disruptions caused by the fighting.

But since the data measure years of education attained during the *lifetime* of the respondents, rather than those attained *by the age of 15*, the figures may mask reductions in average attainments as a result of war.[292] This is because not all individuals achieve all of their lifetime years of education by the age of 15. Some may lose years of education because of conflict but are able to regain them by going back to school between the end of the conflict and the time when the survey was conducted. Where this is the case, the negative short-term impact of conflict will not be revealed by the UIS data.

These caveats mean that few *definitive* conclusions can be drawn from these data. Nevertheless, the broad trends that the data-derived graphics for individual countries describe offer valuable insights into the very different ways that conflict can affect educational systems and that are sometimes sharply at odds with the assumptions of the mainstream narrative.

The main conclusion of the UIS study was that there is:

> [a] significant negative impact of conflict on the proportion of the population with formal education, the average years of education attained, and the literacy rate. This legacy of conflict is visible at the national and sub-national level in household survey data from all countries analyzed, with the exception of six countries.[293]

Trend data displayed in the graphics in the report clearly show educational attainments worsening substantially in some countries, often during long periods of conflict. This is very evident in the cases of Afghanistan, Iraq, and Cambodia—countries that have experienced some of the deadliest conflicts in the past 40 years. In other countries, periods of declining attainment are much shorter, less steep, and take place within longer periods of improving attainments.

The belief that the impact of war reduces educational attainments is uncontroversial, supported by evidence as well as common sense, and is a central theme of the mainstream narrative on education and conflict. But while it is true, it is far from being the whole truth.

An Extraordinary Finding

In almost a quarter of the 25 countries reviewed, UIS's researchers found "no visible impact of conflict on education." They suggested that in these cases what is required is "a more fine-grained municipal-level analysis to pinpoint the conflict-exposed population."[294]

But, as noted earlier, what is perhaps most remarkable about the UIS data is that they demonstrate that in only 11 percent of conflict periods was there a clear deterioration in educational attainment indicators. In almost half the cases the trend was unclear or varied across different indicators. But in more than 40 percent of cases, educational attainment indicators were higher at the end of the conflict period than the beginning. In some of these latter cases there was a fairly steady improvement, in others, there were some periods in which educational attainments worsened, but there was nevertheless a net improvement from the beginning to the end.

> Only 11 percent of conflict periods saw a clear deterioration in educational attainment.

The finding that emerges from the UIS study that educational outcomes often improve during wartime is so counterintuitive, and so much at odds with the mainstream narrative, that it is open to question. One obvious counterargument is that increasing educational attainments in periods of warfare do *not* mean that conflict has no negative impact. The relevant issue is, one might argue, whether attainment rates improve or worsen *relative to the pre-war trend.*

It is evident from the UIS case studies that educational attainments may be negatively affected by the disruptive and destructive effects of conflict but not sufficiently to reverse any long-term improvement evident in the pre-war period. In these cases, educational attainments continue to increase but at a slower rate than in peacetime. Here conflict clearly has a negative effect, but, as we argued earlier, a slower improvement in attainments is still a much better outcome than an absolute decline.

In fact, as we show later, the major study undertaken by PRIO for the World Bank's 2011 *World Development Report* found that, on average, the rate of increase in educational outcomes in conflict-affected countries appeared to be little different from that in countries at peace. This suggests that war had little impact on educational outcomes. This finding is important because the PRIO study included almost all countries in conflict in its review, while the UIS study was restricted to 25.

Some caution is necessary here. The pre-war peacetime educational attainment trend—the so-called counterfactual against which the in-conflict trend can be compared—can be very difficult to determine with confidence, since the pre-war trend is rarely linear. The same applies to in-conflict trends as well.

Educational Attainments in War-Affected Regions versus Unaffected Regions

There are two reasons why the impact of conflict on education in war-affected countries may be difficult to detect in nationwide trend data on educational attainments. First, as we noted earlier, today's predominantly low-intensity wars may be neither deadly nor destructive enough to have any discernible nationwide impact on educational attainments.

In other words, the impact may be there, but may be so small as to be indistinguishable from data uncertainties due to survey error at the national level. But if this is indeed the case, then the impact of war can hardly be described as "devastating" or "disastrous."

This argument is most compelling with respect to the past two decades—particularly since the beginning of the new millennium—than to the Cold War years when war death tolls were much higher on average.

Second, there may be a negative impact of war on educational attainments in regions badly affected by conflict, while in the rest of the country educational attainments continue to improve. Where this happens, especially if the impact of the conflict on attainments is highly localized, the effect may not be discernible in the aggregated nationwide survey data. The impact is real in these cases, but not visible at the national level.

In what was in effect a test of this idea, the UIS research team examined the differences in educational attainments in war-affected versus non-war-affected regions in a number of the countries experiencing conflict.

> Today's predominantly low-intensity wars may not be deadly enough to have any visible impact on education at the national level.

The expectation here is that the war-affected areas will have lower educational attainments than those not directly affected by conflict. This is, in fact, the case in most war-affected countries, as the UIS graphics make clear. Although there were a surprising number of cases where educational outcomes improved even in the worst affected regions.

If educational attainments are lower in the war-affected areas than in those that are at peace, we might reasonably expect that the death, disruption, and destruction associated with the war are responsible for the difference.

This would be a mistake—as UIS's graphics again clearly suggest.[295]

Take the case of Turkey. As Figure 4.1, replicated from the UIS study, clearly indicates, 13- to 17-year-old children in the war-affected Kurdish-inhabited provinces experienced worse educational outcomes during the conflict period than the rest of Turkey.[296]

This is what we would expect given the mainstream narrative's assumption that war affects negatively on education. But the low level of access of children to education in the Kurdish region *preceded the conflict*; and thus, conflict cannot have been its primary cause. Children in the war-affected Kurdish provinces were certainly at an educational disadvantage, but this is largely because they were *already* disadvantaged before the conflict began.

This pattern is evident in the large majority of the cases where conflict-affected and non-conflict-affected regions were compared in the UIS's report.

The lower educational outcomes in the Kurdish areas in both peacetime and wartime were almost certainly caused by some combination of poverty, economic and gender inequality, and governmental neglect—all factors that preceded the conflict—and likely contributed to its onset.

Figure 4.1 Percent of Population without Formal Education in Turkey by Region, 1950–1994
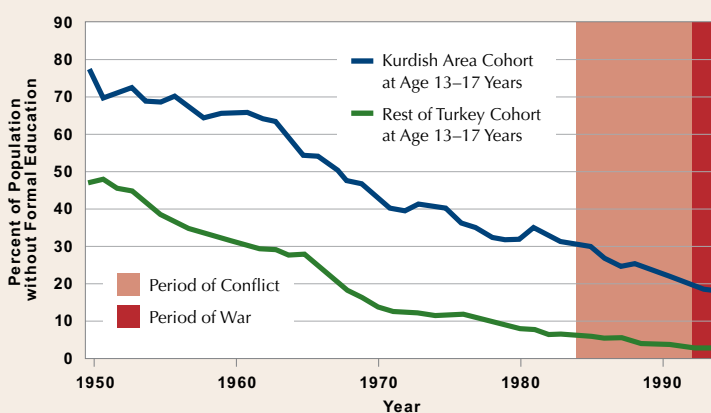
Data Source: UIS.[300]

Surprisingly, school attainment improves in many conflict zones. In Turkey's war-affected Kurdish area, the share of the population with no education fell by over a third among those who were at school-going age during conflict.

Moreover, if the conflict was affecting education more negatively in the conflict-affected Kurdish areas than in other parts of Turkey, we would expect the percentage of individuals with no formal education to shrink more slowly during the conflict than before the conflict. In fact, as Figure 4.1 makes clear, this is not the case.[297] Educational outcomes improved during conflict at a rate that is similar to that before the conflict.

In Turkey this positive trend may in part be a function of the substantial improvement in female educational attainments that had been underway since the 1970s, when female literacy levels started rising more rapidly in the war-affected Kurdish provinces than in the rest of the country.[298] However, while this trend is somewhat surprising, it is not uncommon in other conflict-affected countries.[299]

In Guatemala, which was continuously embroiled in armed conflict from the mid-1960s to the mid-1990s, educational attainments for male students improved, though somewhat unevenly throughout the war and in both the war-affected and non-war-affected regions of the country.

The male students in war-affected regions experienced lower educational attainments than those in non-war-affected regions. But, as was the case in Turkey, the gap in attainments *preceded* the war period, which means that conflict could not have been the primary cause of this gap. Moreover, the rate of improvement in educational outcomes during the 30-plus years of conflict was slightly greater for the war-affected than the non-war-affected regions over this period, again the opposite of what might be expected.[301]

In India the average number of years of education attained per person in the war-affected Jammu and Kashmir region improved through almost all periods of violence.[302] Attainments improved at a *faster* rate in this region than the rest of India from the mid-1980s onwards.[303]

In Ethiopia there was no clear difference in average educational attainments between the conflict-affected Tigray province and the rest of the country before the period of war that started in the mid-1960s. But both regions saw educational attainment rates improve throughout most of the conflict period. But while war-affected Tigray lagged behind the rest of the country during the first years of conflict, its attainment rates subsequently increased and actually exceeded those in non-war-affected parts of the country.[304]

Since these trends are both counterintuitive and very much at odds with the mainstream narrative, it is worth summarizing and briefly reflecting on them:

- In more than 40 percent of cases included in the survey, educational indicators for cohorts of school-age children were better at the end of a conflict period than at the beginning. In only 11 percent were they worse.

- In most countries affected by conflict, the war-affected regions showed lower educational outcomes than the non-war-affected regions. Yet, in almost all countries in which comparisons between war-affected and non-war affected regions were made in the UIS study, the low outcomes in the war-affected regions preceded the conflict and must therefore have had different causes. Factors other than the impact of war—most obviously poverty and poor governance—appear to be the likely determinants of low outcomes both before, and during, conflicts.

- In a number of countries, the rate at which educational outcomes improved in conflict-affected areas *during* a conflict was similar to or greater than the rate of change during the same period in the non-conflict areas. If this finding based on a limited sample of countries is indicative of overall patterns, it again suggests that the impact of conflict is far less dramatic than what we would expect. In many cases, the impact may be too small to be measured with the data we have available.[305]

War Is Only One Factor among Many Affecting Educational Outcomes in Wartime

In focusing attention on the impact of war on education it is easy to forget that other factors also affect educational attainments—and may have a much greater impact. It is quite possible, for example, that low educational attainment scores in war-affected regions of a country are caused by factors that have little to do with the war—an economic crisis caused by persistent drought, for example.

In other cases, the impact of the destruction and displacement caused by warfare on aggregate educational outcomes may be more than offset by the positive effect of other factors—increased income per capita, for example, or a big infusion of international assistance to the educational sector. Where this happens, the trend line indicating that educational attainments in war were improving does *not* necessarily mean that war has no negative impact but simply that this impact was hidden by the positive countervailing effect on educational attainments of other factors.

In Colombia, for example, poverty appears to have been a far more important determinant of educational attainment than the continued presence of armed conflict. During the 40-plus years of conflict in Colombia, rising educational attainments have been associated with a steady and substantial increase in GDP (gross domestic product) per capita. So, it is quite possible that the positive effect of rising incomes on education has more than offset the negative effects of the war.

The most obvious demonstration of the negative impact of non-conflict factors on educational attainments is found in those cases where attainments decline for long periods in peacetime.

Figure 4.2 Average Years of Education in the DRC by Region, 1950–1998
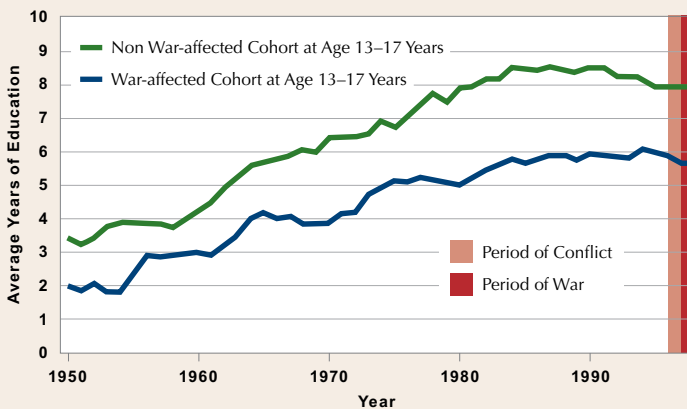
Data Source: UIS.[306]

The conflict in the eastern DRC inflicted a heavy toll on the civilian population. But educational attainments started to stagnate and decline prior to the war— likely as a result of bad governance and economic crisis.

Educational attainments have, on average, been increasing worldwide. Yet, in some countries—even those not afflicted by war—progress can stall, stagnate, and be reversed for long periods. The DRC is a case in point. Here, as Figure 4.2 makes clear, progress in education slowed in the 1980s and stagnated for more than a decade prior to the civil war that started in the late 1990s.

This decline in educational attainments was the result of a decades-long progressive collapse of governance—along with a drop in copper prices—that drove the DRC's GDP per capita down from approximately $300 per capita (in constant USD 2000) in the 1970s, to approximately $100 at the beginning of the periods of civil war that started in the late 1990s.[307]

Interestingly, as we show later, between 2000 and 2007—a period of continuous violence—primary and secondary school educational attendance rates *improved* in parts of the DRC that were most affected by violence.

Average years of education achieved also declined for long periods in peacetime in the DRC's neighbour, the Republic of Congo (sometimes referred to as Congo-Brazzaville).[308] In both countries we witness lengthy declines or periods of stagnation in educational attainments that have nothing to do with conflict itself. The likely causes of the non-war-related educational decline are failures of governance and, relatedly, declining national incomes.

> The EPDC found no strong evidence that education indicators declined dramatically in conflict areas as compared to non-conflict regions.

It is difficult to determine the impact of different and sometimes conflicting factors on educational attainments in periods of conflict with descriptive statistics. To discern the concurrent effects of a range of different causal factors, researchers can turn to regression analysis. We examine this approach in the review of recent econometric research on the impact of war on education at the end of this chapter. It includes the major study undertaken for the World Bank's 2011 *World Development Report* by PRIO.

The Education Policy and Data Center

EPDC's analysis, like the UIS study, was prepared for UNESCO's 2011 *Hidden Crisis report*.[309] But the EPDC looks at school attendance and enrolment rather than at attainment, which was the focus of the UIS study.

The EPDC study examined the differences between conflict-affected and peaceful provinces and regions in 19 countries that experienced warfare between 2000 and 2010. It found that:

- As expected, weighted net attendance rates for primary schools were on average 11 percent lower in conflict areas than peaceful areas,[310] but the EPDC also noted that "it is not possible to establish whether the differences are caused by conflict."[311]

- Comparing trends in school attendance rates in pre-conflict periods with conflict and post-conflict periods does not show that on average "conflict areas experience weaker attendance growth/greater declines."[312]

- There is "no strong evidence that primary attendance rates, enrolment rates, pupil numbers, and pupil teacher ratios decline dramatically in conflict areas as compared to non-conflict regions."[313]

As the authors point out, there are a number of factors that might explain why the negative effect of conflict on education might have remained unobserved in this study, especially regarding issues of data quality and availability.[314]

However, the most surprising finding to emerge from the data was that in many of the countries examined, the regions that were worst affected by wartime violence had experienced *rising* levels of school attendance during conflict periods.

In other words, like the UIS, the EPDC researchers found patterns of association between conflict and educational outcomes that were both counterintuitive and frequently sharply at odds with the assumptions that underpin the mainstream narrative.

Interestingly, both research teams appear somewhat skeptical about their own counterintuitive findings.

The EPDC study covers a much shorter period than does the UIS (which tracks trends back to the 1950s). The EPDC data are also more fine-grained. In many countries in the EPDC study, there are 20 or more regions—in the UIS study, just two. Since the EPDC examined smaller geographical units than the UNESCO study, it should, in principle, have been better placed to detect localized impacts of conflict on education.

Within each country, the EPDC research team compared the trends in school attendance between the "primary" and "secondary" conflict regions, with those that were not directly affected by conflict.

Of the 17 countries for which there was data on primary attendance rates, almost half lacked data for analyzing trends in conflict regions. Since in these cases there was no information on trends, they are not included in this review.[315]

In three of the nine cases that have data for at least two years, Côte d'Ivoire, Afghanistan, and Colombia—attendance rates declined or stagnated during periods of warfare in conflict-affected regions. This is what common sense and the mainstream narrative would lead us to expect.

But in four countries—Senegal, Central African Republic, the DRC, and Rwanda—educational attendance *increased* during periods of warfare in the regions affected by conflict.

In two cases, Uganda and Pakistan, the trend is not sufficiently clear to determine either an overall increase or decrease in attendance.[316]

The EPDC study notes that secondary educational attendance may be "more sensitive to system shocks"[317] than primary school attendance, so it also examined the differences in secondary school attendance between war-affected and non-war-affected regions over time. The pattern turned out to be very similar to that for primary education.

In two countries—Côte d'Ivoire and Rwanda—we find the decline in school attendance that might be expected during periods of warfare.

In four countries—Central African Republic, Colombia, the DRC, and Pakistan—we see attendance rates counterintuitively *rising* during conflict periods, although the increase in some of these cases is very small.[318]

In the remaining countries there are no trend data or the trend is not sufficiently clear.[319]

The EPDC data appear to confirm what the UIS data revealed—namely, that the effect of warfare on education is far more complicated and variable than the mainstream narrative, with its stress on worst affected countries, assumes. We stress, however, that the sample sizes in both the EPDC and the UIS studies are not large enough for any definitive conclusions to be drawn, especially since the countries examined were not randomly selected, creating the possibility of inadvertent selection bias.

Moreover, like is not being compared with like in these studies in two important respects. First, the UIS is examining educational *attainments*, while EPDC's focus is school *attendance*. Second, the time periods are very different—several decades in the case of the UIS, less than 10 years in the case of the EPDC. The more recent period covered by the EPDC studies saw far less deadly and destructive wars than the period examined by the UIS. So, we would expect conflicts to have a lesser impact on education during this period.

In the next section we look at four of the EPDC's case studies, two that reveal the expected negative impact of war on school attendance and two that do not.

Côte d'Ivoire: Primary School Attendance and War

The association between conflict and school attendance in Côte d'Ivoire is exactly what the mainstream narrative would lead us to expect. Figure 4.3 shows the variation over time in gross primary school attendance rates.[320]

Figure 4.3 Primary School Attendance Rates and Conflict in Côte d'Ivoire, 2000–2009
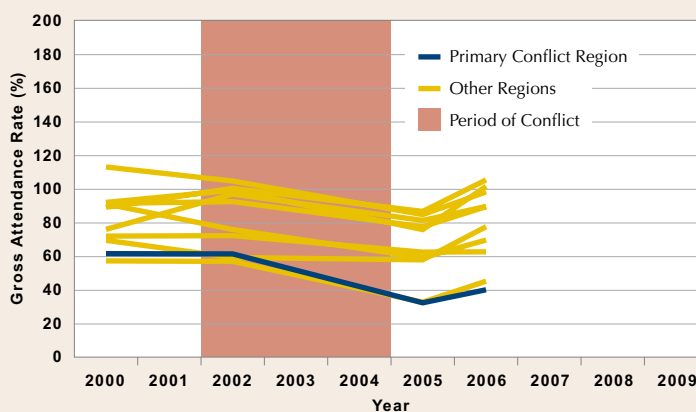
Data Sources: EPDC; UCDP/PRIO.[321]

Côte d'Ivoire's educational system was seriously affected by the armed conflict of the early 2000s. In the most heavily affected region, the primary school attendance rate dropped by almost half.

In the primary conflict region—the blue line on the graph—the gross attendance rate starts to decline shortly after the war begins and continues to decrease throughout the period of conflict. This most-war-affected region also had one of the lowest levels of primary school attendance. The non-conflict regions also witnessed a decline in attendance during the war, suggesting that the deaths, destruction, and disruption caused by the conflict had indirect, as well as direct, negative impacts. After the fighting is over, attendance increased again in all regions.
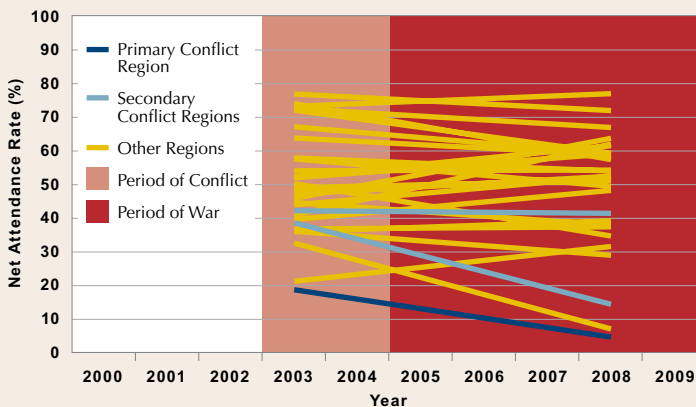
Afghanistan: Primary School Attendance and War

In Afghanistan the data also support the common-sense assumption that regions worst affected by wartime violence will see declines in educational attendance. In two of the three worst affected regions (namely Helmand and Kandahar), attendance rates dropped dramatically, while in the third region, Khost, the decline was less pronounced.

Afghanistan is unusual in that education suffers in considerable part because schools—and students—are deliberately targeted by insurgent groups.

Much of the insurgent violence against schools in Afghanistan has taken place in the provinces of Helmand, Kandahar, and other parts of the southern and eastern region of the country where there is a strong Taliban presence. In 2011, according to the country's Education Ministry, some 400 schools remained closed in this region because of security concerns.[322]

Figure 4.4 Primary School Attendance Rates and Conflict in Afghanistan, 2000–2009

Data Sources: EPDC; UCDP/PRIO.[323]

Three war-affected Afghan provinces experienced declines in primary school attendance: Helmand, Kandahar, and Khost. They also witnessed many targeted attacks on children and their schools.

Note: This graph shows the net attendance rate while Figures 4.3, 4.5, and 4.6 show the gross attendance rate.

In the Taliban-influenced areas, educational attendance rates are among the lowest in Afghanistan, and militants have mounted campaigns of violence, including acid attacks, to deter girls from attending schools. In Helmand girls made up just 5 percent of school enrolment in 2004, compared with the national average of 35 percent.[324]

### Senegal: Primary School Attendance and War

The association between war and educational attendance in Senegal, as Figure 4.5 below shows, is dramatically different from that which both common sense and the mainstream narrative would lead us to expect.

In most war-affected countries analyzed in the UIS report above, the regions most afflicted by armed conflict have, as we might expect, educational outcomes that are worse than non-conflict-afflicted regions.[325]

But surprisingly, in Senegal's worst affected conflict region (Ziguinchor), the gross primary school attendance rate was the highest in the country throughout the conflict period and continued to rise over time.

It is not clear what accounts for this truly surprising outcome. But two points are worth noting. First, the level of political violence in Senegal was *very* low. The best estimate of reported battle deaths for the two periods of warfare in Senegal averaged just 40 per year. We would not expect a conflict with such low battle deaths to have a discernible impact on educational outcomes.[326]

Figure 4.5 Primary School Attendance Rates and Conflict in Senegal, 2000–2009
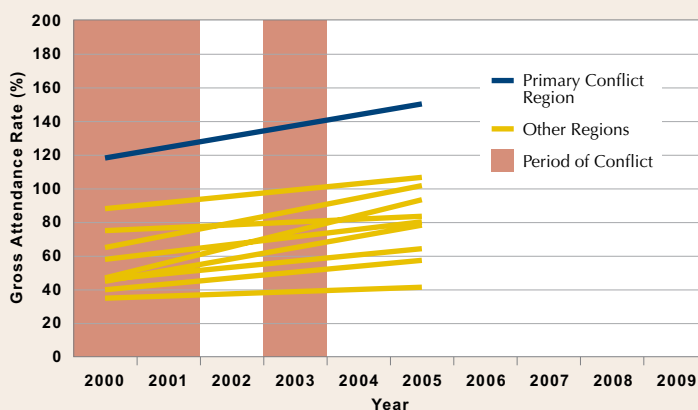
Data Sources: EPDC; UCDP/PRIO.[327]

In the conflict-affected Senegalese territory of Casamance, school attendance rates were higher than in nonconflict regions and actually appear to have increased between 2000 and 2005.

But secondly, while this may help explain why educational attendance levels in the primary conflict region did not *decline* during the war periods, it cannot explain why they were so much higher than the rest of the country.

We do not know the answer to this question, but the higher rates in Ziguinchor may have existed prior to the war (which started in the early 1990s). We note, however, that the gross attendance rate in the primary conflict region in 2005 was a remarkable 150 percent, i.e., it was 50 percent higher than would be the case if all primary school aged children—and only children of that age group—attended school. The additional 50 percent of students were those who missed years of schooling when they were younger—likely for reasons related to the conflict—and were now catching up. If this was the case, the high attendance rates during the conflict period were as much an indication of past educational failure as of current success.

The DRC: Primary School Attendance and War

In the DRC, as Figure 4.6 shows, we witness school attendance not only increasing in the regions worst affected by political violence but doing so at a rate greater than nearly all of the other regions in the country.

Figure 4.6 Primary School Attendance Rates and Conflict in the DRC, 2000–2009
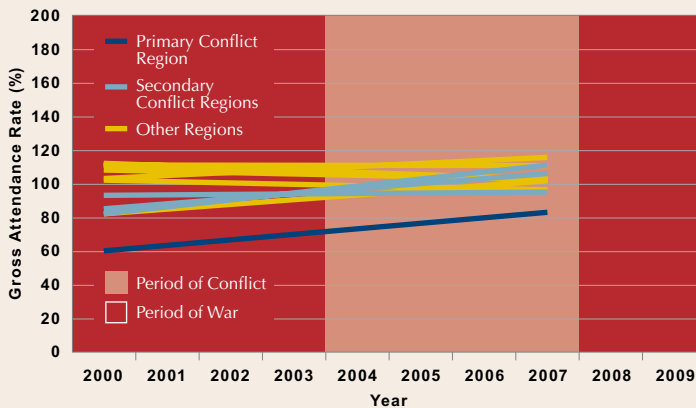
Data Sources: EPDC; UCDP/HSRP.[328]

Primary school attendance in the DRC's conflict-affected North Kivu region increased by over a third from 2000 to 2007—likely because of reduced violence and increased international aid following the 2002 peace deal.

Note: Because the DRC experienced a high level of non-state and one-sided violence between 2002 and 2005 while no state-based armed conflict was recorded at the same time, we include deaths from all three types of organized violence in this graph.

As we noted previously, a catastrophic decline in the DRC's economy that started in the 1970s was responsible for the subsequent stagnation, then decline, in educational attainments.

Between 1980 and 2002, spending per pupil per year in primary and secondary schools fell by 96 percent as governance of the country progressively collapsed.[329] During the 1960s and 1970s, educational spending had amounted to more than 20 percent of total government expenditure; during the 1990s, it had shrunk to just 1 percent.[330] But by the beginning of the new millennium, spending on education had risen again to between 5 and 8 percent of government expenditure.[331]

The increased share of the state budget going to education was not, however, evident in increased gross school attendance rates for most of the country. As Figure 4.6 clearly indicates, in most non-conflict regions, school attendance rates remained stagnant in the new millennium, while some actually declined.

Paradoxically, however, two regions worst affected by conflict, North Kivu (the primary conflict region) and South Kivu (one of the secondary conflict regions), experienced the largest increases in attendance rates in the country.[332]

We do not have enough information to understand why this should be the case, but two possibilities suggest themselves. First, North and South Kivu have not only been the epicentre of conflict in the eastern DRC but they have also received the lion's share of post-conflict reconstruction assistance, including assistance for education. It is quite possible that the regions most affected by the conflict have also benefitted most from the increase in government spending on education.

Second, according to one report, an extraordinary 81 percent of the population of the eastern DRC has been displaced at some point since 1993.[333] Since children under 15 make up almost half the population in the DRC, the impact of displacement on education must have been very large, not least because most IDPs lack access to education.[334] So, the big increase in gross primary school attendance in the Kivus, evident in Figure 4.6, may have been due to children who had been displaced and subsequently returned to the classroom to catch up on years of education lost.

These examples illustrate two of the most persuasive explanations for educational outcomes that improve during periods of conflict (we discuss additional explanations below). First, as was the case in Senegal, the extent of death and destruction generated by today's wars may simply be too small to have any discernible nationwide, or even regional, impact on educational outcomes. Second, the positive effect of a recovery in government spending, coupled with a surge in international assistance in the wake of a peace agreement, can more than offset the negative impact of ongoing political violence on school attendance rates, even in the worst affected regions. This seems to have been the case in the DRC.

Descriptive Statistics and the Impact of War on Education

The descriptive statistics approach adopted by the UIS and EPDC focuses on trend data in a series of country case studies and provides a substantial amount of information on the variety of very different educational outcomes associated with periods of armed conflict. The data used by these studies challenge the mainstream narrative that depicts the impact of war on educational outcomes by using terms like "devastating" and "disastrous."

To summarize briefly: the discussion of the UIS data revealed that educational attainments *improved* during periods of conflict in a substantial percentage of the cases examined. Educational outcomes improved during the fighting, even in regions directly affected by the fighting.

As mentioned earlier, EPDC's analysis was more fine-grained. Instead of comparing educational outcomes in just two very broad categories (conflict-affected and non-conflict-affected), EPDC researchers compared "primary and secondary" conflict-affected regions with a large number of non-conflict regions—20 or more in many cases.

In principle, the impact of geographically localized conflict on educational outcomes should be easier to detect in the considerable smaller regions EPDC surveyed. Surprisingly, however, EPDC-collated data revealed that educational outcomes even improved in many of the regions *worst affected* by conflict.

Both the UIS and EPDC make the case there *is* an impact of conflict on educational outcomes, but they note that in many of the countries analyzed, the methodology they use may be insufficiently sensitive to detect the impact.

The UIS report suggests that a "municipal-level analysis" may be necessary to discern the localized impact of conflict.[335]

EPDC's researchers note that:

It may be that the effects of violence on the provision of education … can only be measured at *the most local levels of disaggregation*.[336]

> The UIS data revealed that educational attainments improved during periods of conflict in a substantial percentage of the cases that were examined.

It is clearly true that nationwide survey data can fail to detect the impact of war in some cases—a small town where schools may have been completely destroyed and teachers killed, for example. Such individual impacts may be undetectable in the aggregated nationwide, or even region-wide, data on educational outcomes. But if there is a sufficient number of such impacts, the nationwide impact *will* be detected in the data.

But if such events are rare, the consequences, while tragic for the local inhabitants and devastating for the local educational system, will have no discernible impact on nationwide educational outcomes. And it is *national* educational challenges and achievements that are the focus, not only of this study but of the mainstream narrative as well.

The EPDC researchers appear somewhat skeptical about their own findings, since they stress on several occasions that possible shortcomings in the survey data may be preventing the relationship between conflict and education from becoming apparent.[337]

In addition to concerns noted above, they point out that the surveys whose findings they draw on may not collect data in areas directly affected by violence. Data that are only drawn from peaceful areas will clearly be biased.

The EPDC research team reviewed data from 37 household surveys and found that in six of 16 cases for which there was documentation on sampling, "regions or portions of regions had been left out of the survey due to security concerns."[338] However, they also pointed out that there was not sufficient evidence to show that the missing data in these cases would have had a major impact on the study's findings.[339]

The most important limitation of both the UIS and the EPDC's studies is that they are relatively small nonrandom samples of the universe of possible cases of conflict affecting educational outcomes.

This, as the EPDC study notes, "is not sufficient to serve as the basis for global generalizations about the relationship between conflict and education."[340]

> PRIO researchers found that conflict had no statistically significant impact on education.

Only with regression analyses that draw upon the universe of possible cases can we make generalizations with any degree of confidence. In the next section we review the small number of econometric studies that have used regression analysis to seek to determine the average impact of conflict on education.

Econometric Studies of the Impact of War on Education

In this section we examine the remarkable, but little-publicized, findings of the very small number of econometric studies that have examined the impact of war on educational outcomes based on a large sample of countries and observations. (The term *Large-N* simply refers to large numbers. In conflict research it is often used to describe datasets that include most countries in the international system over a period of several decades or more. *Small-N* studies typically involve qualitative comparative case studies of a small number of countries.)

To the best of our knowledge, just three studies have used regression analysis and cross-national data to determine possible associations between conflict and educational enrolment and attainment. Two of these studies include all or nearly all countries that have experienced conflict over the time span of a decade or more.

The aim of these analyses is to identify whether, in general, conflict has a negative effect on education, and whether this effect is independent, i.e., whether it holds true when we control for other factors that might also cause a decline of educational outcomes.[341]

The most recent econometric study on the impact of war on the achievement of the MDGs—including education—was undertaken by researchers from PRIO for the World Bank's 2011 *World Development Report*. The PRIO team found that, on average, conflict had no statistically significant impact on educational attainments at the primary or secondary school levels.[342]

The contrast between this finding and the claims associated with the mainstream narrative, to the effect that the impact of war on educational systems is "devastating" and "disastrous," etc., could hardly be greater.

Figure 4.7, which we reproduce from the PRIO study, shows that countries in conflict had lower educational attainments than countries at peace, which is unsurprising. The attainment rates for countries at peace increase steadily, which is again not unexpected. The PRIO study researchers found that, on average, educational attainments improved by about 2 percent in every five-year period.[343]

Figure 4.7 Trends in Secondary Educational Attainment Rates, 1990–2008
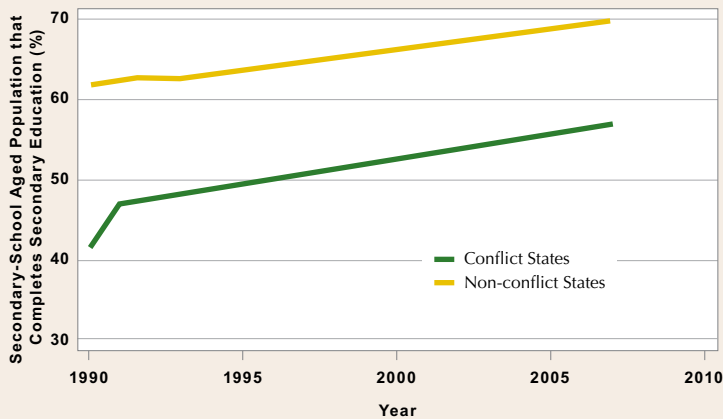
Educational outcomes in conflict countries are lower on average than in non-conflict countries. Remarkably, however, school attainment increased at a similar rate in both conflict countries and nonconflict countries.

What *is* surprising is that, as Figure 4.7 shows, secondary school educational attainments in the war-affected countries improved, again on average, at the same rate as they improved in the nonconflict countries.

This suggests that wartime violence was having little or no impact on the rate of improvement in educational attainment—or that any negative impact on the rate is so small that it is not visible in the graph.

If conflict were having a net negative impact on educational attainments, then the educational attainment trend line for the conflict countries would have declined relative to the trend line for the nonconflict countries.

The PRIO research team's regression analyses on the effect of conflict on primary school enrolment and secondary school attainment confirm what the graph above suggests. They demonstrate that conflict has no statistically significant impact on educational outcomes at either the primary or secondary level.[344]

The fact that the PRIO researchers found that warfare had no *statistically significant* impact on educational outcomes does not mean that they found no impact at all. In fact, the PRIO team's regression analyses revealed that conflict was associated with a very small reduction in

educational outcomes, on average. But the association was not statistically significant—i.e., it was discernible, but it could have been determined purely by chance.

If this analysis is correct, it means that the average effect of conflict on educational outcomes is, at most, a minor decrease in the rate at which they improve.

An earlier cross-national statistical study that examined the impact of war on a range of development indicators was undertaken by the World Bank and published in the *World Bank Economic Review* in 2008. Among other things, it examined the trend in median educational enrolments at the primary and secondary school levels in seven-year periods of peace before and after periods of armed conflict.[346] It compared countries affected by war with control groups of other developing countries that were not war-affected.

It found that, on average, secondary school enrolments were appreciably higher for conflict countries in the post-conflict period compared to the pre-conflict period. This complements the findings of the PRIO study and the more tentative conclusions we drew from the UIS multi-country study.

The data in the *World Bank Economic Review* paper, like those of the PRIO study, indicate that countries in conflict have lower educational outcomes than nonconflict developing countries, which appears to support the mainstream assumption that conflict *causes* a decline in enrolments.

But the data also indicate that the low primary school enrolments of the *countries that were to become involved in conflict* were lower still *before* the conflict started. The *World Bank Economic Review* study is, however, limited by the fact that it only included a relatively small numbers of countries in conflict in its analysis.

A reliable guide to the trend in educational outcomes for war-affected countries *before* they succumb to conflict comes from the data collected for the PRIO study referred to earlier. Although Figure 4.7 above only shows how educational attainments improve in the conflict-affected countries from 1990 to 2008, the PRIO researchers also analyzed data on average educational attainments of war-affected conflicts before they succumbed to war, which they shared with HSRP.

> The data indicate that the low primary school enrolments of the countries that were to become involved in conflict were lower still before the conflict started.

These trend data indicate very clearly that the major cause of the considerable gap between nonconflict and conflict countries is *not* the disruption and destruction of warfare between 1990 and 2008. The countries that were affected by war in this period had *even lower educational outcomes prior to the war*.

War in individual countries may indeed have had an impact, and wars in all countries may have slightly slowed the rate at which average educational outcomes improved, but warfare was *not* the reason that they were low in the first place.

The highly counterintuitive findings produced by these studies are uncontested but also largely unacknowledged. However, by themselves they tell us nothing about *why* the impact of armed conflict on education should appear to be so limited.

One explanation, already noted above, is that in recent decades wars have become far less deadly and destructive. Consequently, their impact is simply not great enough to reverse the long-term peacetime trend toward improving educational outcomes.

Second, conflict may have a negative effect if it slows the pre-war rate of improvement, but not sufficiently to reverse it. While this is likely true of a substantial number of countries in conflict, the PRIO study indicates that, on average, educational outcomes in conflict-affected countries improve at a very similar rate to nonconflict countries. This suggests that any negative effect is very small.

Third, a negative impact of conflict on education may be more common than the data that we review here suggest, but it may also be too short-lived to be easily detected. It is worth noting in this context that the surveys on which the studies reviewed here are based are typically not carried out every year. If a short-lived conflict erupted soon after one of these surveys were undertaken, the negative effects of the war might not be detectable in the subsequent survey.

Fourth, while war may well be destructive enough in some cases to have a negative impact on education, this effect may be offset by the impact of other factors that cause educational outcomes to improve. For example, in some countries national incomes continue to rise throughout periods of warfare. Where this is the case, the positive effect on education of rising incomes—which may enable more parents to send children to school, for example—may be stronger than the negative impacts of warfare.

A Challenge to the Finding That Educational Outcomes Do Not Decline during War

The two World Bank studies indicate that the overall impact of conflict on educational outcomes is much smaller than is assumed by the mainstream narrative.

However, an earlier econometric study published in the *Journal of Peace Research* in 2007 found that the impact of war on education is both statistically and substantively significant. Indeed, authors Brian Lai and Clayton Thyne argue that conflict is "devastating for a system of education, as both expenditures and enrolment decline during periods of civil war."[347]

Lai and Thyne note that across all the econometric models that they test states in civil war experience a decline in educational enrolments of between 1.6 and 3.2 percent, dependent on the level of schooling.[348]

Both the PRIO study for the World Bank and the Lai and Thyne study rely on regression analysis in seeking to determine the impact of war on educational outcomes while holding constant other possible causal factors.

However, the two studies are different in many ways. They use different datasets, over different time periods and different econometric models. These differences, particularly with respect to the choice of econometric models, likely account for a substantial portion of the difference in findings.

Yet, upon closer examination, the differences between the two studies are not that great. Both find a negative effect of war on educational outcomes. PRIO finds a very small effect that is not statistically significant. Lai and Thyne find a small effect that *is* statistically significant.

A critical challenge for both studies is to determine to what extent the low educational outcomes that are evident in wartime are determined by the disruptive and destructive effects of conflict, as the mainstream narrative assumes, and to what extent they are determined by factors that are already pervasive in peacetime and continue to play a role in wartime.

Factors that might affect educational outcomes negatively in peacetime include generally weak governance structures; incompetent official management of the national educational system; deep poverty—which keeps children out of school because their parents cannot afford school fees or need them to work at home; and corruption within the school system—i.e., teachers being paid but not turning up for work. These factors are part of a broader system of state fragility, the effects of which we discuss in the conclusion.

It is important that the models and data sources that are used in the regression analyses take into account the impact on educational outcomes of *all* the major factors that may be driving educational outcomes downward—these include the governance and poverty-related factors noted above. If important factors are left out of the study, the analyst will likely attribute the measured effect to the wrong "causal" factor. The attribution would be to a factor that—like conflict—is correlated with the omitted variables.

Consider a hypothetical case where the educational system in a particular country that had become embroiled in conflict suffered from increasingly incompetent management administration and pervasive corruption within the school system, and that these factors had driven educational outcomes downwards in peacetime and continued to do so in wartime.

Further suppose that the researchers had been unable to access reliable cross-national data on either managerial competence or corruption within the school system. This would mean that neither factor could be included as a control variable in the regression analyses that sought to determine the impact of war on educational outcomes.

It is not unusual for potentially important causal factors to be left out of regression analyses because data on indicators that can measure their variance is simply unobtainable.

In our hypothetical example, the impact of the important omitted variables on educational outcomes would therefore be hidden and would be attributed to other factors—likely the conflict itself.

> Conflict may slow the rate of improvement in educational outcomes, but not sufficiently to reverse it.

As we noted earlier, both the PRIO and the Lai and Thyne studies rely on different datasets, cover different time periods, and use different econometric models that have quite different approaches to meeting the challenge of omitted variable bias. These differences alone could be sufficient to account for their divergent findings. But to determine whether this is the case would require an in-depth methodological investigation that is beyond the scope of this *Report*.

Summing Up: Assessing the Evidence

There are, as we have shown, three quite different ways of examining the impact of warfare on education in the research literature.

First, there are the individual country case studies that explore the impact of war on national and local educational systems. These detailed case studies provide nuanced and contextualized analyses of the many ways in which conflict can disrupt and reduce children's educational opportunities.

The findings of these studies and the lessons that have been drawn from them inform what we have called the "mainstream narrative" on the impact of war on education. This narrative is associated with, and articulated by, major international organizations such as UNESCO and UNICEF, and by leading NGOs like Save the Children. These organizations play crucial roles in formulating policy, delivering service, and undertaking advocacy campaigns in this area.

> Generalizing from the particular is especially prone to error when the focus of research and policy is affected by selection bias.

Although critically important to our understanding of the wide variation in the impact of war on educational systems, the findings of small numbers of case studies should not be used—as they sometimes are—to make *general* claims about the effects of war on education. There is simply no way of determining whether the different impacts of conflict on education in a small number of war-affected countries are representative of the average impact of conflict on educational outcomes in *all* war-affected countries.

Generalizing from the particular, which is characteristic of the mainstream narrative, is particularly prone to error when the focus of research and policy is affected by selection bias.

The mainstream narrative is affected by selection bias in that it presents a picture of the impact of war on education that is—understandably—partial. Policy-makers, advocates, and researchers have focused most attention on countries and regions of countries where warfare has posed the gravest threats to children and their educational opportunities.

These extreme cases tend to be treated as the norm, with analysts, as well as advocates, using terms like "disastrous" and "devastating" as general descriptions of the impact of conflict on education. Such language is appropriate for the worst affected countries—Afghanistan, Iraq, Timor-Leste, and Cambodia under the Khmer Rouge, for example. Yet, these countries, we have argued, are the exceptions, not the rule.

The second source of evidence on the impact of war on education examined in this chapter came from the multi-country studies undertaken by UIS and EPDC.

Unlike many of the individual case studies that inform the mainstream narrative, the surveys on which the UIS and EPDC studies rely use common methodologies and definitions. These data can therefore be used to reveal trends in educational outcomes across a substantial number of war-affected countries.

Both studies use statistical data on educational outcomes derived from population surveys in some 20 conflict-affected countries. In each case, the data are presented graphically to reveal the associations between conflict and educational outcomes.

The trend data published in the multi-country UIS and EPDC studies present a picture that is frequently at odds with core assumptions that underpin the mainstream narrative of the impact of war on education:

- In a large proportion of cases, indicators for educational outcomes *improve* during the periods of fighting.
- Even more counterintuitively, both the UIS and the EPDC studies reveal that educational outcomes in conflict-affected countries improve in many cases in regions that are *most affected* by the impact of warfare.
- Each study shows that, in general, educational outcomes are substantially lower in the regions that are worst affected by conflict than in regions that are not directly affected.
- The data in the UIS study also reveal, however, that in most cases the low outcomes in the worst affected regions were low—*or even lower*—in the pre-war periods. This indicates, contrary to the assumptions of the mainstream narrative, that the low educational outcomes in war are not driven primarily by warfare, but by factors that predate the war.

Although these are multi-country studies, and although there is no reason to assume they suffer from the sort of selection bias that is evident in the choice of the case studies that inform much of the mainstream narrative, their sample size is too small, and the descriptive trend analysis too coarse, to treat the results as more than highly intriguing and suggestive of general trends.

As the EPDC study's careful authors put it, the relatively small number of countries included in their study means that its findings should not be used to make "global generalizations about the relationship between conflict and education."[349]

Generalizing about the impact of conflict on educational outcomes requires cross-national studies that have data on all, or nearly all, countries that experienced conflict over a period of at least several decades, plus data on a control group of nonconflict studies.[350]

We reviewed three such cross-national statistical studies that met these criteria and as we pointed out, some of their findings differ.

The descriptive statistics in the PRIO study revealed that educational outcomes generally improve in war-affected countries. The *World Bank Economic Review* study similarly found that educational outcomes were higher in post-conflict periods compared to pre-conflict periods. The data from the UIS multi-country study showed that in a substantial proportion of cases, educational outcomes were clearly higher at the end of a conflict period than at the beginning, while only a small percentage showed a clear deterioration.

The PRIO study's regression analyses found that, on average, there was no *statistically significant* impact of conflict on educational outcomes. But there was a very small negative impact. The Lai and Thyne study found there was a statistically significant negative association between conflict and educational outcomes, but that it was small.

Both studies show that, as might be expected, war-affected countries have lower educational outcomes than nonconflict countries. The mainstream narrative, on the other hand, assumes that war is the cause of the lower outcomes in the conflict-affected countries.

> The *World Bank Economic Review* study found that educational outcomes were higher in the post-conflict periods compared to pre-conflict periods.

But the data from the PRIO study make it clear that the lower educational outcomes in wartime were also present in the pre-war period, indicating that they were largely determined by factors that preceded the war. In fact, educational outcomes are even lower in the periods of peace before the war than during the war itself. This finding fits with the data from the *World Bank Economic Review* study and the UIS study.

This critically important fact is ignored in the mainstream narrative, where the low educational outcomes in wartime are generally assumed to be caused by the disruption and destruction of warfare.

Finally, there is the Lai and Thyne finding that war does have a statistically significant impact on educational outcomes, albeit a small one. While this finding is in line with the mainstream narrative on the impact of war on education, it is somewhat at odds with the PRIO study, whose findings are supported by the *World Bank Economic Review* analysis, as well as the suggestive patterns that we find in the UIS and EPDC studies.[351]

Such differences in findings are common in the quantitative literature on the causes and consequences of civil war.[352] We suspect that the major source of the difference between the Lai and Thyne and PRIO studies lies in how their respective models correct for the challenging problem of omitted variable bias that we discussed earlier. But addressing this issue in more detail is beyond the scope of this chapter.

As far as we can determine, only three cross-national statistical studies have sought to determine the impact of war on education. This compares with a multitude of econometric studies on, for example, the causes of civil war onsets and duration.

> The evidence suggests that conflict does not have the devastating impact on educational systems that is a central assumption of the mainstream analysis.

More research is needed to produce the robust conclusions about the impact of war on education that are currently lacking, and to resolve some of the differences between the current studies.

The evidence, we have argued, suggests that conflict does not have the devastating impact on educational systems that is a central assumption of the mainstream analysis. On average, educational outcomes actually improve during many periods of warfare. What explains this counterintuitive and rather remarkable finding remains far from clear, however.

Conclusion

A consistent theme in the mainstream narrative on conflict and education has been the hugely destructive impact of the former on the latter, with educational outcomes in conflict-affected countries being notably worse than those in nonconflict countries as a consequence.[353]

If, as it is claimed, the disruptive and destructive impacts of conflict are major drivers of low educational outcomes in war-affected countries, then protecting children and schools from these threats, and seeking to bring wars to an end, become obvious policy priorities. Indeed, UNESCO's 2011 *Hidden Crisis* report makes just such a case, calling for "a more robust defense of children, civilians and school systems on the front line of conflict."[354] The report further argues that:

> the most immediate challenge facing the international community is to strengthen protection and maintain access to education for those on the front line and for those displaced from their homes.[355]

While in the longer term:

> Peace and post-conflict reconstruction are the only viable foundations for achieving accelerated progress towards universal primary education and wider goals in conflict-affected countries.[356]

Protecting children and schools during wartime and seeking to end wars, and prevent those that have ended from starting again, are important and worthwhile goals in themselves. But neither address the very real possibility that the reason educational outcomes are, on average, lower in conflict-affected countries than nonconflict countries is because they were *already lower* before the war started. This suggests that the primary cause of low educational outcomes in wartime is not war itself, but factors that preceded it in peacetime.[357]

If policy-makers are concerned with low educational outcomes in wartime, then policy needs to address their root causes—i.e., those that predate the fighting.

Here an obvious candidate is state *fragility*, a term that describes the complex syndrome of interrelated governance challenges and pathologies that prevent, or slow down, the attainment of a broad range of development goals—including better educational outcomes.

> If policy-makers are concerned with low educational outcomes in wartime, they need to address their root causes—which predate the conflict.

Most states involved in civil wars would be designated as *fragile,* but definitions of fragility include countries that are not affected by conflict, but that also have weak institutions and governance. The PRIO study for the World Bank has its own category of fragile states that are *not* conflict-affected. Interestingly, as Figure 4.7 shows, these states turn out to have even lower educational attainments than the conflict-affected countries.[358]

There is no consensus definition of state fragility in the literature, but most analysts would agree that elements of fragility include:

- Weak and ineffectual national governance.
- The inability, or unwillingness, of national governments to provide basic security for citizens.
- Low governmental capacity—or will—to deliver other essential services, including education.
- Lack of legitimacy of the state in the eyes of citizens.
- Pervasive corruption.
- Armed conflict and other forms of organized violence.

These elements tend to be *mutually constitutive,* which means that each in part determines the other. From this it follows that addressing fragility and its consequences requires multidimensional and multi-stakeholder responses. This is precisely the direction in which the international development and security community has been moving since the end of the Cold War.

The increased commitment to multidimensional and multi-stakeholder policies in fragile states is most obviously evident in the dramatic post-Cold War shift from traditional peacekeeping operations—that often involved little more than UN "blue helmets" monitoring ceasefire agreements—to the present multidimensional and highly complex peacebuilding operations.

Addressing fragility as an interrelated syndrome, rather than as a series of discrete problems, is also central to the work of the Inter-Agency Network for Education in Emergencies (INEE) and the OECD's (Organisation for Economic Co-operation and Development's) International Network on Conflict and Fragility (INCAF).[359]

In all cases, the primary policy goal is to help to create effective, legitimate, resilient, and sustainable institutions of effective governance, i.e., the antitheses of fragile institutions. Such institutions help promote the realization of development goals—including better educational outcomes.

Conflict, from this perspective, is just one of many elements of state fragility and its associated low educational outcomes.

The mainstream narrative on conflict and education depicts the low educational outcomes in war-affected countries as being caused by the disruption and destruction of warfare. But viewing the association between war and low educational outcomes through the lens of state fragility suggests a very different picture.

Rather than seeking to determine if conflict is the cause of low educational outcomes, the fragility lens focuses our attention on the broad range of challenges to education posed by state fragility in peacetime—factors that are also major determinants of educational outcomes in wartime.[360]

But state fragility in peacetime does not explain why educational outcomes should, on average, continue to *improve* in periods of war. In some cases, the rates of improvement are comparable to, and sometimes even higher than, those in peacetime. Indeed, this is the most counterintuitive finding to emerge from our research.

How is the puzzle to be explained?

First, there is, as we have pointed out, a long-term average trend towards better educational outcomes in developing countries in peacetime—*even in those countries with fragile institutions*—and that few of today's wars are deadly or destructive enough to reverse this long-term trend.

Second, we noted the additional possibility that in particular cases the negative impact of conflict on educational outcomes could be offset by other factors, such as rising incomes or infusions of international assistance, that tend to improve enrolment and attainment rates during, and despite of, the armed conflict.

But there is another, more general, explanation for why educational outcomes improve in wartime. This explanation is somewhat conjectural. There is some evidence to support it, but not enough to be confident that it is correct.

Over the last 15 years, there appears to have been a substantial *decline* in state fragility, which is, as we point out, an important cause of low performing educational systems.

The State Fragility Index produced by the Washington, DC-based Center for Systemic Peace (CSP) measures the fragility level of countries around the world. Between 1995 and 2010, its data indicate that overall state fragility decreased by over 20 percent worldwide.[361]

Over roughly the same period, there has moreover been significant progress towards achieving better educational outcomes and other key development goals in developing countries overall.

If high levels of state fragility are an important part of the explanation of low educational outcomes, we would expect that as fragility declines overall, educational outcomes will also tend to improve in fragile states. This is, in fact, what appears to be the case.

> Over the last 15 years, there appears to have been a substantial decline in state fragility.

While state fragility declined worldwide between 1995 and 2010, the PRIO study shows educational outcomes improving substantially in both conflict-affected and nonconflict fragile states, between 1990 and 2008.

Moreover, it is not just educational outcomes that often improve despite warfare. In the previous *Human Security Report*, we showed that child mortality rates declined in 90 percent of the years that countries were involved in war.

And, as we noted earlier in this chapter, the descriptive statistics from the PRIO report indicate that even though conflict may slow down—or even reverse—progress towards development goals in some countries, the general trend is towards improvement. Rates of malnutrition, life expectancy, infant and maternal mortality, plus access to sanitation and potable water all improve on average during periods of war.

These rather extraordinary findings have, to the best of our knowledge, not been replicated elsewhere, nor has their importance been assessed.[362] For students of both education and civil war, they are at once surprising, intriguing, and encouraging. They also suggest a clear need for more research to confirm—or challenge—the counterintuitive trends, and to examine their causes and policy implications more thoroughly.

ENDNOTES

OVERVIEW

1   References for all statistics and quotations in the Overview are found in the main body of the *Report* unless otherwise indicated.

2   Note that while conflict-related sexual violence declines when wars end, it may take significantly longer to stop completely.

3   For women aged 18 and above, the CDC found the rate for women was 18.3 percent—meaning that nearly one in five women had been victimized by sexual violence in their lifetimes. See Michele Black et al., *The National Intimate Partner and Sexual Violence Survey: 2010 Summary Report* (Atlanta: National Center for Injury Prevention and Control; Centers for Disease Control and Prevention, 2011), 18, http://www.cdc.gov/ViolencePrevention/pdf/NISVS_Report2010-a.pdf (accessed 3 September 2012).

4   Scott Gates et al., "Development Consequences of Armed Conflict," *World Development* 40, no. 9 (2012): 1713–1722, 1718, doi: 10.1016/j.worlddev.2012.04.031 (accessed 2 September 2012).

5   Japan International Cooperation Agency (JICA), "The Difficulty and Perils of Education in Afghanistan," http://www.jica.go.jp/english/news/focus_on/afghanistan/afghanistan_3.html (accessed 3 September 2012).

6   The particular measure of fragility that the PRIO researchers used did not, as do others, include conflict as one of its elements.

CHAPTER 1

7   Elisabeth Rehn and Ellen Johnson Sirleaf, *Women, War and Peace: The Independent Experts' Assessment on the Impact of Armed Conflict on Women and Women's Role in Peace Building* (New York: UNIFEM, 2002), 9, http://www.ucm.es/cont/descargas/documento7201.pdf (accessed 8 June 2012).

8   For a detailed description of the "narrative" concept, see Severine Autesserre, "Dangerous Tales: Dominant Narratives on the Congo and Their Unintended Consequences," *African Affairs* (2012): 6-9, doi: 10.1093/afraf/adr080 (accessed 8 June 2012).

9   Anne M. Goetz, "Introduction" (presented at the Wilton Park Conference, *Women Targeted or Affected by Armed Conflict: What Role for Military Peacekeepers?*, Sussex, UK, 27 May 2008), 1, http://www.unifem.org/attachments/events/WiltonParkConference_Presentations_200805.pdf (accessed 29 January 2012).

10 Wood's definition is based on that used by the International Criminal Court, see Elisabeth. J. Wood, "Armed Groups and Sexual Violence: When Is Wartime Rape Rare?" *Politics & Society* 37, no. 1 (2009): 5, doi: 10.1177/0032329208329755 (accessed 8 June 2012).

11 We do not include female genital cutting under this rubric since its motivation is very different.

12   Wynne Russell, who studies sexual violence against males, notes that although obtaining reliable data remains a major challenge, "the greatest difference between the male and female experiences appears to revolve around whether sexual violence is perpetrated with the body of the perpetrator, or with an object. The homosexuality taboo means that many captors of men will use objects to penetrate their victims, while captors of women are more likely to engage in penile penetration. Both are rape, by Wood's definition; both are also torture … Also, men appear to be more likely to be subjected to pain to the genitals or genital mutilation that does not involve a sexual assault, but that is designed to interfere with future sexual function or reproduction." Personal e-mail communication with Andrew Mack, 19 February 2012.

13   Because many studies do not clearly identify perpetrators as combatants, this will sometimes also include other cases of stranger rape perpetrated by civilians unknown to the victim. We note throughout the chapter where this is the case.

14   When presenting survey results, standard statistical practice is to provide not only the single best estimate but also some measure that indicates the degree of certainty about its accuracy. The conventional approach is to provide *95-percent confidence intervals* for the point estimate. Put simply, this means that if one were to sample the same population repeatedly, then the range within which 95 percent of the samples fall would constitute the confidence interval.

15   Dara Cohen, "Causes of Rape During Civil War: Cross-National Evidence (1980–2009)," University of Minnesota, 29 January 2012, unpublished manuscript, 50, table S1.

16   As we argue below, there is compelling evidence that reporting of human rights violations in general has increased over the last two decades, but no compelling independent evidence exists that actual violations have increased in this period.

17   United Nations Entity for Gender Equality and the Empowerment of Women, "Beijing and its Follow-up," http://www.un.org/womenwatch/daw/beijing/ (accessed 15 March 2012).

18   Domestic sexual violence that is perpetrated by intimate partners is sometimes treated as a separate category and referred to as intimate-partner sexual violence.

19   Domestic sexual violence is prevalent in wartime as well as in peacetime; indeed, it is often argued that its incidence increases in conflict and post-conflict environments. Such war-exacerbated rates of domestic sexual violence could, in principle, be included in a very broad definition of *conflict-related sexual violence*. However, since it would be very difficult to identify elevated levels of domestic sexual violence in war-affected countries or attribute them to armed conflict given the dearth of data, our discussion of conflict-related sexual violence is limited to that perpetrated by combatants.

20   Note that by using the term "war-affected," we do *not* limit the analysis to only those countries that experience *war* as defined by the Uppsala Conflict Data Program (UCDP), whose data we use in this report, i.e., a conflict with 1,000 or more battle deaths per year. We specify wherever we refer to a particular battle-death threshold.

21   As a recent study by the International Peace Research Institute Oslo, notes:

"In the first five post-conflict years, there were reports of sexual violence by one-quarter of state armies and about one-third of all rebel groups and militias."

See Ragnhild Nordås, "Sexual Violence in African Conflicts," Peace Research Institute Oslo, January 2011, http://www.prio.no/sptrans/-1641546546/SVAC-CSCW-Policy-Brief-01-2011.pdf (accessed 13 August 2012).

22   In many surveys only women between 15 and 49 were questioned.

23   The lifetime prevalence rate of sexual violence is not a measure of the *wartime* prevalence, because it includes individuals that have experienced sexual violence in peacetime. The lifetime prevalence rate is, however, often the only available measure to estimate the extent of sexual violence in war-affected countries.

In some surveys, respondents are asked if they have been victimized in the past 12 months—providing data to compute *annual* prevalence rates. This is not particularly useful with respect to understanding wartime sexual violence, however, since surveys are very rarely taken *during* a war. Post-war retrospective surveys could, in principle, ask respondents if they had been victimized by sexual violence during the conflict and if so in what year. But responses are likely to be affected by recall bias, and questions that require respondents to indicate in which year they were violated are rarely asked.

24   Claudia García-Moreno et al., *WHO Multi-Country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses* (Geneva: WHO Press, 2005), http://www.who.int/gender/violence/who_multicountry_study/en/ (accessed 18 July 2012).

25   United Nations Division for the Advancement of Women, United Nations Economic Commission for Europe, United Nations Statistical Division, *Indicators to measure violence against women: Report of the Expert Group Meeting* (Geneva: United Nations, 2007), 21, http://www.un.org/womenwatch/daw/egm/IndicatorsVAW/IndicatorsVAW_EGM_report.pdf (accessed 14 August 2012). This report notes, "There are different understandings associated with prevalence and incidents of violence against women. There is no difference between them if each victim suffers just one incident in the given time period" (21). Many surveys include estimates of lifetime prevalence and prevalence over the past 12 months. Since the surveys are rarely taken during a conflict, the latter measure is of little value for measuring prevalence in wartime.

26   See, for example, the results of a survey in the Democratic Republic of the Congo (DRC) for data on the number of times that married, separated, or divorced women had been victims of physical or sexual violence in the 12 months preceding the survey. Ministère du Plan and Macro International, *Enquête Démographique et de Santé: République Démocratique du Congo 2007* (Calverton, MD: Ministère du Plan and Macro International, 2008), 308, http://www.minisanterdc.cd/fr/documents/eds.pdf (accessed 14 August 2012).

27 See World Health Organization (WHO), *WHO Ethical and Safety Recommendations for Researching, Documenting and Monitoring Sexual Violence in Emergencies* (Geneva, Switzerland: WHO, 2007), http://www.who.int/gender/documents/OMS_Ethics&Safety10Aug07.pdf (accessed 15 March 2012) and Shana Swiss and Peggy J. Jennings, "Documenting the Impact of Conflict on Women Living in Internally Displaced Persons Camps in Sri Lanka: Some Ethical Considerations," Women's Rights International, 2007, http://www.womens-rights.org/Publications/Ethics_IDPSurvey.pdf/ (accessed 16 March 2012).

28 Indeed, as we point out in Chapter 3, unless surveys can provide respondents with the option of anonymously answering highly sensitive questions about being victimized by sexual violence, their responses can substantially underestimate the actual prevalence of sexual violence.

29 Dara Cohen, "The Incidence and Intensity of Wartime Sexual Violence," 6 March 2010, unpublished background paper prepared for the Human Security Report Project (HSRP), 3.

30 Jeanne Ward, Jackie Kirk, and Lisa Ernst, *Broken Bodies, Broken Dreams: Violence against Women Exposed* (Nairobi, Kenya: OCHA/IRIN, 2005), http://www.irinnews.org/InDepthMain.aspx?InDepthId=59&ReportId=72831 (accessed 16 March 2012).

31 Cohen, "Causes of Rape During Civil War."

32 Ibid., 20.

33 The four levels were:
   ▪ Level 0: no reported cases of rape related to the conflict.
   ▪ Level 1: "some" reports, "isolated" reports of conflict-related rape.
   ▪ Level 2: "widespread," "extensive," "common" reports of conflict-related rape.
   ▪ Level 3: "systematic" and "massive" reports of sexual violence and references to rape being used as a "weapon," "tactic," or "tool" of war.

   See ibid., 50, table S1. As with all datasets, this one is subject to a number of limitations. These are discussed on pages 21–23 of the paper.

34 The data are provided by Dara Cohen. The dataset covers the years 1980–2009 and the respective figures for the entire period are 5 percent (Level 3), 19 percent (Level 2), 25 percent (Level 1), and 51 percent (Level 0). We, however, chose figures from the most recent decade because the Cohen data indicate that in the earlier years covered, especially the 1980s, there was little or no reported sexual violence in the large majority of years of active conflict, despite the fact that conflicts were far deadlier than in the 2000–2009 period. We believe that there is a strong possibility that the low levels of reported sexual violence in this period were almost certainly a function of low levels of reporting, *not* low levels of sexual violence. For this reason, we believe that the 2000–2009 period, where there is no doubt that reporting of wartime sexual violence had been far higher than in earlier periods, is likely to provide a more accurate picture of the cross-national variation in the intensity of sexual violence than the data from the 1980s and 1990s.

35   See Elisabeth Wood, "Variation in Sexual Violence during War," *Politics & Society* 34, no. 3 (2006): 307–341, doi: 10.1177/0032329206290426 (accessed 8 June 2012); Wood, "Armed Groups and Sexual Violence"; and Cohen, "Causes of Rape During Civil War."

36   Rehn and Johnson Sirleaf, *Women, War and Peace*, 10.

37   Ward, Kirk, and Ernst, *Broken Bodies, Broken Dreams.*

38   Office of the SRSG (Special Representative of the Secretary-General) for Children and Armed Conflict and UNICEF, "Ending Gender-Based Violence and Sexual Exploitation," in *Children and Conflict in a Changing World: Machel Study 10-Year Strategic Review* (New York: Office of the SRSG for Children and Armed Conflict and UNICEF, 2009), http://www.un.org/children/conflict/machel/english/811-ending-gender-based-violence-and-sexual-exploitation.html (accessed 26 February 2012).

39   Jan Egeland, "International Responsibilities," in "Sexual Violence: Weapon of War, Impediment to Peace," ed. Marion Couldrey and Tim Morris, special issue, *Forced Migration Review* 27 (January 2007): 8, http://www.fmreview.org/FMRpdfs/FMR27/full.pdf (accessed 26 February 2012).

40   Wilton Park Conference, ed., *Women Targeted or Affected by Armed Conflict: What Role for Military Peacekeepers? Conference Summary* (2008).

41   For a broad discussion of global trends in state-based armed conflict, see Chapter 5 of this *Report*.

42   Ward, Kirk, and Ernst, *Broken Bodies, Broken Dreams.*

43   Cohen, "Causes of Rape During Civil War," 31.

44   A third possibility is that both have increased.

45   Amber Peterman et al., "Rape Reporting During War: Why the Numbers Don't Mean What You Think They Do," *Foreign Affairs*, 1 August 2011, http://www.foreignaffairs.com/articles/68008/amber-peterman-dara-kay-cohen-tia-palermo-and-amelia-hoover-gree/rape-reporting-during-war?page=show (accessed 26 February 2012).

46   Howard Ramos, James Ron, and Oskar N.T. Thoms, "Shaping the Northern Media's Human Rights Coverage, 1986–2000," *Journal of Peace Research* 44, no. 4 (2007): fig. 1, 387, doi: 10.1177/0022343307078943 (accessed 6 March 2012). Reporting on human rights showed significant increases in other papers as well, ranging from 20 percent to 200 percent over the same period.

47   Ann Marie Clark and Kathryn Sikkink, "Information Effects and Human Rights Data: Is the Good News about Increased Human Rights Information Bad News for Human Rights Measures?" January 2011, unpublished manuscript.

48   Ibid., 24. The PTS relies in large part on the US State Department's human rights reporting, which Dara Cohen also uses in her study.

49   Clark and Sikkink, "Information Effects and Human Rights Data," 23–27.

50   Ibid., 27.

51   Severine Autesserre, "Dangerous Tales: Dominant Narratives on the Congo and their Unintended Consequences," *African Affairs* (2012): 13, doi: 10.1093/afraf/adr080 (accessed 15 March 2012).

52   Ibid., 13.

53   Tara Gingerich and Jennifer Leaning have described some of the factors that may motivate strategic rape:

- It creates a sense of fear in the civilian population and restricts freedom of movement and economic activity.

- It can instill flight which facilitates the capture of land and killing of male civilians who are left more vulnerable to attack when fleeing.

- It demoralises the population and reduces their will to resist and prolongs their forced exit from the land.

- It tears apart communities by breaking family and community bonds (thus diminishing the reproductive capacity of the community) and by "polluting" the blood line.

See Gingerich and Leaning, "The Use of Rape as a Weapon of War in the Conflict in Darfur, Sudan" (Boston, MA: Program on Humanitarian Crises and Human Rights, Harvard School of Public Health, 2004), 17–18, http://reliefweb.int/sites/reliefweb.int/files/resources/B119C9EFB7DCAA2DC1256F5F004FBEA9-hu-sud-31oct.pdf (accessed 26 February 2012).

54   See Kofi A. Annan, *Women, Peace and Security: Study Submitted by the Secretary-General Pursuant to Security Council Resolution 1325 (2000)* (New York: UN, 2002), 2, http://www.un.org/womenwatch/daw/public/eWPS.pdf (accessed 26 February 2012). Emphasis added.

55   Tsjeard Bouta, Georg Frerks, and Ian Bannon, *Gender, Conflict, and Development* (Washington, DC: World Bank, 2005), 35, http://www.wds.worldbank.org/servlet/WDSContentServer/WDSP/IB/2004/11/15/000090341_20041115142901/Rendered/PDF/30494.pdf (accessed 26 February 2012).

56   Cited in Stephanie Nebehay, "Rape Used as Weapon in Libya and Elsewhere: U.N.," *Reuters Health News*, 10 June 2011, http://reuters_th.adam.com/content.aspx?productId=16&pid=16&gid=45497 (accessed 26 February 2012).

57   See Alexandra Stiglmayer, ed., *Mass Rape: The War against Women in Bosnia-Herzegovina* (Lincoln: University of Nebraska Press, 2011).

58   The 20 countries were not randomly selected, which means that the findings are not necessarily representative of all of sub-Saharan Africa, let alone the rest of the world. See Ragnhild Nordås, "Sexual violence in African conflicts," in *CSCW Policy Brief* 01 (Oslo, Norway: Centre for the Study of Civil War, PRIO, 2011), 3, http://www.prio.no/sptrans/-782981433/SVAC_policy_brief_Sexual%20Violence%20in%20African%20Conflicts.pdf (accessed 26 February 2012).

59   See ibid., 3.

60 Dara Cohen, for example, notes that in Sierra Leone many NGOs argued that wartime rape was an integral part of the military and political campaigns pursued by the rebels, particularly the notorious Revolutionary United Front (RUF). But in her own extensive interviews she found that while former rebels were quite frank about the fact that they had perpetrated sexual violence, there was little evidence of strategic rape. See Dara Kay Cohen, "Explaining Sexual Violence During War" (Ph.D. diss., Stanford University, 2010), 95.

61 Maria Eriksson Baaz and Maria Stern, "The Complexity of Violence: A Critical Analysis of Sexual Violence in the Democratic Republic of Congo (DRC)" (working paper, Uppsala: Nordika Afrikainstitutet, 2010), 15–16, http://nai.diva-portal.org/smash/record.jsf?page=statistics&pid=diva2:319527 (accessed 27 February 2012). See also Maria E. Baaz and Maria Stern, "Why Do Soldiers Rape? Masculinity, Violence, and Sexuality in the Armed Forces in the Congo (DRC)," *International Studies Quarterly* 53, no. 2 (2009), doi: 10.1111/j.1468-2478.2009.00543.x (accessed 26 February 2012).

62 Baaz and Stern, "The Complexity of Violence," 14.

63 Ibid., 17–24.

64 Wynne Russell, "A Silence as Deep as Death: Sexual Violence against Men and Boys During Armed Conflicts" (background paper prepared for the Office for the Coordination of Humanitarian Affairs Expert Meeting, "Use of Sexual Violence in Conflict," New York, 26 June 2008), 1. This paper provides a concise overview of the key issues and a lengthy bibliography.

65 UN Security Council, S/RES/1820(2008), http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N08/391/44/PDF/N0839144.pdf (accessed 18 May 2012). The resolution often referred to "civilians," which of course includes males, but in various instances limited the focus specifically to women and girls.

66 UN Security Council, S/RES/1325 (2000), http://www.un.org/events/res_1325e.pdf (accessed 16 May 2012).

67 Ibid., 619. See also Russell, "A Silence as Deep as Death."

68 See Lara Stemple, "Male Rape and Human Rights," *Hastings Law Journal* 60 (2009): 605–647.

69 UN Office for the Coordination of Humanitarian Affairs, "The Nature, Scope and Motivation for Sexual Violence against Men and Boys in Armed Conflict" (background paper prepared for the Office for the Coordination of Humanitarian Affairs Expert Meeting, "Use of Sexual Violence in Conflict," New York, 26 June 2008), http://ochaonline.un.org/OchaLinkClick.aspx?link=ocha&docId=1092305 (accessed 16 March 2012).

70 See, for example, UN Population Fund, *The State of World Population 2010: From Conflict and Crisis to Renewal: Generations of Change* (New York: UN Population Fund, 2010), Chapter 4, http://www.unfpa.org/swp/2010/web/en/pdf/EN_SOWP10.pdf (accessed 27 February 2012); and UN Office for the Coordination of Humanitarian Affairs, *The Nature, Scope and Motivation for Sexual Violence.*

71   Michele Leiby, "Principals, Agents, and Wartime Sexual Violence," (paper presented at the annual meeting of the American Political Science Association, Washington, DC, 2 September, 2010), 17. See also Pauline Oosterhoff, Prisca Zwanikken, and Evert Ketting, "Sexual Torture of Men in Croatia and Other Conflict Situations: An Open Secret," *Reproductive Health Matters* 12, no. 23 (2004), http://pramudithrupasinghe.weebly.com/uploads/4/2/1/8/4218922/sexual_torture_of_men_in_croatia_and_other_conflict.pdf (accessed 16 March 2012).

72   Lara Stemple points out that the abuse of males in wartime often takes place in prisoner of war camps and interrogation centres. The UN, for example, "reported that out of 5,000 male concentration camp detainees held near Sarajevo during the Bosnian conflict, 80 percent acknowledged having been abused sexually. In El Salvador 76 percent of male political prisoners told researchers they had experienced sexual torture." Lara Stemple, "The Hidden Victims of Wartime Rape," *New York Times*, 1 March 2011, http://www.nytimes.com/2011/03/02/opinion/02stemple.html?_r=1 (accessed 27 February 2012). For more details, see Stemple, "Male Rape and Human Rights."

73   Kirsten Johnson et al., "Association of Combatant Status and Sexual Violence With Health and Mental Health Outcomes in Postconflict Liberia," *JAMA: The Journal of the American Medical Association* 300, no. 6 (2008): 680, doi: 10.1001/jama.300.6.676, http://jama.ama-assn.org/content/300/6/676.full.pdf+html?sid=ae0751d1-ac0b-4f88-b7c7-2ced65a80382 (accessed 27 February 2012).

74   This extraordinarily high number may reflect the fact that many individuals served with government or rebel forces for a relatively short period of time—it does not mean that one-third of the population were serving as fighters or supporters all the time.

75   If only those who participated in combat are considered, the figure would be 14 percent. Note that in none of these figures, the combatants would be all serving at the same time, of course.

76   Johnson et al., "Association of Combatant Status and Sexual Violence," 681. The term *combatant* includes roles in the military that do not necessarily involve fighting—cooks, porters, messengers, etc.

77   These included "being forced to undress or being stripped of clothing." See ibid., 680.

78   Ibid., 683.

79   Ibid.

80   K. Johnson et al., "Association of Sexual Violence and Human Rights Violations With Physical and Mental Health in Territories of the Eastern Democratic Republic of the Congo," *JAMA: The Journal of the American Medical Association* 304, no. 5 (2010): 557 doi: 10.1001/jama.2010.1086, http://jama.ama-assn.org/content/304/5/553.full.pdf+html?sid=3b1ab62a-616d-4232-816a-073af2b5a505, 557 (accessed 6 March 2012). The rape category excluded lesser forms of sexual violence, but the most commonly reported type of sexual violence was rape. Almost two-thirds of the male cases of sexual violence and three-fourths of the female cases of sexual violence were conflict-related, but the authors do not specifiy how this is measured.

81   This is beginning to change. A major new study on this issue is being undertaken by University of Florida, Laura Sjoberg. Entitled *Rape Among Women: Genocidal Rape and Sex Subordination*, it will be published by New York University Press.

82   Cohen, "Explaining Sexual Violence During War," 165.

83   Johnson et al., "Association of Sexual Violence and Human Rights Violations," 557.

84   Dara Cohen, "Female Combatants and the Perpetration of Violence: The Case of Wartime Rape in the Sierra Leone Civil War," (unpublished manuscript), 2, 30.

85   The *neighbourhood method* uses household interviews to ask women not only about their own experiences of sexual violence but also those of others in their home and among their immediate neighbours. This method creates what is effectively a bigger sample size than is possible by questioning a single respondent about her own household. One obvious potential problem with the neighbourhood method is that the primary respondent may be misinformed about the prevalence of sexual violence among her neighbours. There is evidence from some of the surveys that this is in fact the case. See Ann Warner, "Incidence of Violence against Women and Girls in Liberia: A Quantitative Study Using the 'Neighborhood Method,'" International Rescue Committee and the Program on Forced Migration and Health, Mailman School of Public Health, Columbia University, 4, 19, http://www.forcedmigration.columbia.edu/research/documents/IRCReportonNeighbor hoodStudy_10-1-07.pdf (accessed 27 February 2012).

86   Care and Protection of Children in Crisis-Affected Countries (CPC) Learning Network, "Rethinking Gender-Based Violence," 7, http://www.forcedmigration.columbia.edu/research/documents/GBV_Brief_winter_2010.pdf (accessed 27 February 2012).

87   Ibid.

88   Lindsay Stark et al., "Measuring Violence against Women Amidst War and Displacement in Northern Uganda Using the 'Neighborhood Method,'" Program on Forced Migration and Health, Mailman School of Public Health, Columbia University; ChildFund International, 10–11, http://www.forcedmigration.columbia.edu/research/documents/ StarkRobertsAchamBoothbyAger2009MeasuringVioAgainstWomenJEpidemiol CommunityHealth.pdf (accessed 27 February 2012).

89   The rate at the national level was 12 percent. See Amber Peterman, Tia Palermo, and Caryn Bredenkamp, "Estimates and Determinants of Sexual Violence against Women in the Democratic Republic of Congo," *American Journal of Public Health* 101, no. 6 (2011): 1060–1067, doi: 10.2105/AJPH.2010.300070 (accessed 1 March 2012). The data for this study came from a 2007 study by the Demographic and Health Survey (DHS). See DRC Ministry of Planning (MoP) and Macro International Inc., *Democratic Republic of the Congo Demographic and Health Survey 2007: Key Finding* (Calverton, MD: DRC MoP and Macro International Inc., 2007), http://www.measuredhs.com/pubs/pdf/SR141/ SR141.pdf (accessed 1 March 2012); UN Women, *Violence against Women Prevalence Data: Surveys by Country* (New York: UN Entity for Gender Equality and the Empowerment of Women, 2011), http://www.endvawnow.org/uploads/browser/files/vaw_prevalence_ matrix_15april_2011.pdf (accessed 1 March 2012).

90   Inter Press Service News Agency, "Q&A: 'There Is Almost Total Impunity for Rape in Congo,'" 28 June 2010, http://www.ipsnews.net/2010/06/qa-there-is-almost-total-impunity-for-rape-in-congo/ (accessed 1 March 2012).

91   Uganda Bureau of Statistics (UBOS) and Macro International Inc., *Uganda Demographic and Health Survey 2006* (Calverton, MD: UBOS and Macro International Inc., 2007), 290, http://www.measuredhs.com/pubs/pdf/FR194/FR194.pdf (accessed 1 March 2012).

92   Unpublished data provided by the WHO (World Health Organization) based on Claudia García-Moreno et al., *WHO Multi-Country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses*, (Geneva: WHO Press, 2005), http://www.who.int/gender/violence/who_multicountry_study/en/ (accessed 15 August 2012). The survey undertaken in Ethiopia as part of the WHO's multi-country global survey of sexual violence was carried out in a largely rural district deemed "broadly representative of the country as a whole." See Yemane Berhane, "Ending Domestic Violence against Women in Ethiopia," *Ethiopian Journal of Health Development* 18, no. 4 (2004), 131–132.

93   UBOS and Macro International Inc., *Uganda Demographic and Health Survey 2006*, 290, 292.

     Even the notoriously violent Lord's Resistance Army (LRA) that abducted large numbers of girls and young women had a strictly enforced code governing sexual behaviour among its fighters. Sex was only permitted in forced "marriages" arranged between female abductees and LRA fighters. Sexual violence against other abductees and nonabducted civilians was strictly prohibited and rare, "and violations were severely punished, often with death." From Jeannie Annan et al., "Women and Girls at War: 'Wives,' Mothers, and Fighters in the Lord's Resistance Army," 10–11, http://www.prio.no/sptrans/185286780/blattman-women@war.1009.pdf (accessed 1 March 2012).

94   Unpublished data provided by the WHO based on Claudia García-Moreno et al., *WHO Multi-Country Study on Women's Health and Domestic Violence against Women: Summary Report of Initial Results on Prevalence, Health Outcomes and Women's Responses* (Geneva: WHO, 2005), 12, http://www.who.int/gender/violence/who_multicountry_study/summary_report/summary_report_English2.pdf (accessed 29 January 2012). A 2009 survey undertaken in seven regions of Ethiopia by the Population Council and the UN Population Fund (UNFPA) of some 8,000 women aged 15 and 49 asked who the perpetrators were when a woman's first experience of sexual intercourse was forcefully coerced. It found that "92 percent were husbands, 6 percent were boyfriends or fiancés, and 2 percent were acquaintances or classmates."

     See Population Council and UNFPA, *Ethiopia Gender Survey: A Study in Seven Regions* (New York: Population Council, 2010), 60, http://www.popcouncil.org/pdfs/2010PGY_EthiopiaGenderSurvey.pdf (accessed 6 May 2012).

95   Amber Peterman, Tia Palermo, and Caryn Bredenkamp, "Estimates and Determinants of Sexual Violence against Women in the Democratic Republic of Congo," *American Journal of Public Health* 101, no. 6 (2011), 1060-1067, doi: 10.2105/AJPH.2010.300070 (accessed 1 March 2012).

96   Pan African News Agency, "UN Chief Says Sexual Violence a Threat to Peace, Security," 23 September 2011, http://www.panapress.com/UN-chief-says-sexual-violence-a-threat-to-peace,-security--12-796358-25-lang2-index.html (accessed 1 March 2012).

97   Care and Protection of Children in Crisis-Affected Countries (CPC) Learning Network, "Rethinking Gender-Based Violence," 3.

98   Amber Peterman, Tia Palermo, and Caryn Bredenkamp, "Estimates and Determinants of Sexual Violence against Women in the Democratic Republic of Congo," *American Journal of Public Health* 101, no. 6 (2011): 1065. This stands in contrast to the results of the JAMA study cited above, which found that in 72 (females) and 86 (males) percent of the cases, combatants were reported as perpetrators. The study was, however, based on a much smaller sample than the DHS data and undertaken in some of the regions worst affected by the civil war.

99   Dara Cohen, for example, stresses that gang rapes are used to build cohesion among combatants, something that obviously has little relevance for explaining domestic violence. Cohen, "Causes of Rape During Civil War," 4.

100   Peterman, Palermo, and Bredenkamp, "Estimates and Determinants of Sexual Violence."

      Lori Handrahan, "Conflict, Gender, Ethnicity and Post-Conflict Reconstruction," Security Dialogue 35, no. 4 (2004): 429–445.

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101   LaShawn R. Jefferson, "In War as in Peace: Sexual Violence and Women's Status," in *Human Rights and Armed Conflict: Human Rights Watch World Report 2004* (New York, NY: Human Rights Watch, 2004), 324–350, http://www.hrw.org/legacy/wr2k4/download/wr2k4.pdf (accessed 14 April 2012).

102   For a more comprehensive analysis of how these incentive structures shape narratives and, as a result, policy-making, see Peter Andreas and Kelly M. Greenhill, eds., *Sex, Drugs, and Body Counts: The Politics of Numbers in Global Crime and Conflict* (Ithaca, NY: Cornell University Press, 2010).

103   According to OECD (Organisation for Economic Co-operation and Development) and UN data, $6.7 billion was raised from governments around the world in 2000; by 2010 this had risen to an estimated $12.4 billion. Development Initiatives, *Global Humanitarian Assistance Report 2011* (Wells, U.K.: Development Initiatives, 2011), fig. 3, 12, http://www.globalhumanitarianassistance.org/wp-content/uploads/2011/07/gha-report-2011.pdf (accessed 14 April 2012).

104   Ibid., fig. 3, 55.

105 In 2010, for example, only 63 percent of the CAP request was actually allocated. Since the beginning of the new millennium, on average, 33 percent of annual requests have gone unfunded. Ibid., figs. 8–9, 60–61. The CAP is not the only source of humanitarian funding, of course, but the pattern it exhibits—of demand exceeding supply—is typical of almost all funding exercises.

106 Ian Smillie and Larry Minear, *The Charity of Nations: Humanitarian action in a calculating world* (Bloomfield, CT: Kumarian Press, 2004), 207.

107 Humanitarian Policy Group, "According to Need? Needs Assessment and Decision-Making in the Humanitarian Sector," *Overseas Development Institute Report* (London, U.K.: Overseas Development Institute, 2003), 56, http://www.odi.org.uk/resources/docs/285.pdf (accessed 7 June 2012). Also cited in Smillie and Minear, *The Charity of Nations*, 204.

108 See Smillie and Minear, The Charity of Nations, 207. See also David Rieff, "Millions May Die … Or Not: How Disaster Hype Became a Big Global Business," *Foreign Policy*, September/October 2011, http://www.foreignpolicy.com/articles/2011/08/15/millions_may_die_or_not?page=full (accessed 14 April 2012), and Human Security Report Project (HSRP), *Human Security Report 2009/2010: The Causes of Peace and the Shrinking Costs of War* (New York: Oxford University Press, 2011), 126.

109 Peter Andreas and Kelly M. Greenhill, "Conclusion: The Numbers in Politics," in *Sex, Drugs and Body Counts: The Politics of Numbers in Global Crime and Conflict*, ed. Peter Andreas and Kelly M. Greenhill (Ithaca: Cornell University Press, 2010), 265.

110 Nicholas D. Kristof, "After Wars, Mass Rapes Persist," *New York Times*, 20 May 2009, http://www.nytimes.com/2009/05/21/opinion/21kristof.html (accessed 16 August 2012). Kristof was not the first to cite a prevalence rate in the order of 75 percent for Liberia. A paper by Dara Cohen and Amelia Hoover Green investigates the questionable claim made by Kristof and others in more detail. See Dara Kay Cohen and Amelia Hoover Green, "Dueling Incentives: Sexual Violence in Liberia and the Politics of Human Rights Advocacy," *Journal of Peace Research* 49, no. 3 (2012): 445–458, doi: 10.1177/0022343312436769 (accessed 16 August 2012). See also the review posted on the blog *Feminist Critics*, "Have 75% of Women in Liberia Been Raped? (NoH)," 8 June 2012, http://www.feministcritics.org/blog/2009/06/08/have-75-of-women-in-liberia-been-raped-noh/ (accessed 31 July 2012).

111 Marie-Claire O. Omanyondo, "Sexual Gender-Based Violence and Health Facility Needs Assessment," WHO, September 2004, http://www.who.int/hac/crises/lbr/Liberia_GBV_2004_FINAL.pdf (accessed 15 August 2012). There are a number of other possible sources for Kristof's extraordinary claim, but none can be used to support it.

112 Ibid., 6, 16.

113 Liberia Institute of Statistics and Geo-Information Services (LISGIS), Ministry of Health and Social Welfare, National AIDS Control Program, Macro International, *Liberia Demographic and Health Survey 2007*, 230, http://www.measuredhs.com/pubs/pdf/fr201/fr201.pdf (accessed 16 August 2012).

114 Kelly M. Greenhill, "Counting the Cost: The Politics of Numbers in Armed Conflict," in *Sex, Drugs, and Body Counts*, ed. Peter Andreas and Kelly M. Greenhill (Ithaca, NY: Cornell University Press, 2010), 128. Greenhill argues that unreliable statistics can prove counterproductive from "political, humanitarian, juridical and scholarly perspectives" (127).

115 Kelly M. Greenhill, "Counting the Cost: The Politics of Numbers in Armed Conflict," in *Sex, Drugs and Body Counts: The Politics of Numbers in Global Crime and Conflict*, ed. Peter Andreas and Kelly M. Greenhill (Ithaca: Cornell University Press, 2010), 136.

116 See Rieff, "Millions May Die," (accessed 14 April 2012).

117 For a discussion of donor skepticism towards inflated humanitarian claims, see Smillie and Minear, *The Charity of Nations*.

118 Peter Andreas and Kelly M. Greenhill, "Conclusion: The Numbers in Politics," *Sex, Drugs and Body Counts: The Politics of Numbers in Global Crime and Conflict*, ed. Peter Andreas and Kelly M. Greenhill (Ithaca: Cornell University Press, 2010), 268.

119 See, for example, Elisabeth Wood, "Armed Groups and Sexual Violence: When Is Wartime Rape Rare?" *Politics & Society* 37, no. 1 (2009): 131–161, doi: 10.1177/0032329208329755 (accessed 13 July 2012); Dara Cohen, "Causes of Rape During Civil War: Cross-National Evidence (1980–2009)," University of Minnesota, January 2012: 1–45; and Ragnhild Nordas, "Sexual Violence in African Conflicts," in *CSCW Policy Brief* 01 (Oslo, Norway: Centre for the Study of Civil War, Peace Research Institute Oslo [PRIO], 2011): 1–4, http://www.prio.no/sptrans/-782981433/SVAC_policy_brief_Sexual%20Violence%20in%20African%20Conflicts.pdf (accessed 26 February 2012).

120 We pointed out that this assumption is at odds with the data on reported sexual violence compiled by Dara Cohen, based on US State Department reports and other reports. These data do indeed show that reported conflict-related sexual violence has increased over the past three decades. But, as we argued in Chapter 1, this increase is likely a function of better and more extensive reporting, rather than an increase in sexual violence.

121 In 2010 Jordan Ryan, assistant administrator of the United Nations Development Programme and director of the Bureau for Crisis Prevention and Recovery, stated, with what was an uncharacteristic candour for a senior UN official, that "we have not anywhere prevented sexual violence." See United Nations Population Fund (UNFPA), "Chapter Eight: And the Next 10 Years?" *State of the World Population 2010: From Conflict and Crisis to Renewal: Generations of Change* (New York, NY: United Nations, 2010), 82, http://www.unfpa.org/swp/2010/web/en/ch8.shtml (accessed 18 June 2012).

122 In practice, however, the Security Council has shown little enthusiasm for imposing sanctions on known perpetrators of sexual violence in armed conflict. Security Council Report, "Cross-cutting Report on Women, Peace and Security," 2010, 25, 28, http://www.securitycouncilreport.org/atf/cf/%7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/XCutting%20WPS%202010.pdf (accessed 27 February 2012).

123 Kathryn Sikkink argues that this may be an effective strategy for reducing rights abuses over the long term. Kathryn Sikkink, *The Justice Cascade: How Human Rights Prosecutions Are Changing World Politics*, 1st ed. (New York: W. W. Norton & Co., 2011).

124 For a comprehensive review of the UN's neglect of sexual violence against males, see Sandesh Sivakumaran, "Lost in Translation: UN Responses to Sexual Violence against Men and Boys in Situations of Armed Conflict," *International Review of the Red Cross* 92, no. 877 (2010): 259–277, doi: 10.1017/S1816383110000020 (accessed 13 July 2012).

125 United Nations, *Conflict-Related Sexual Violence: Report of the Secretary-General*, United Nations General Assembly and Security Council (New York, NY: United Nations, 2012), 2, http://www.humansecuritygateway.com/documents/UNSC_Reportof theSecretaryGeneral_ConflictRelatedSexualViolence_A66657.pdf (accessed 14 April 2012).

126 Ibid., 3. Emphasis added.

127 The omission of males from the Women, Peace and Security agenda 1325 is not surprising given that senior UN officials have argued strongly against including sexual violence against males as part of the 1325 policy agenda. See Anne M. Goetz, "Introduction" (paper presented at the Wilton Park Conference, *Women Targeted or Affected by Armed Conflict: What Role for Military Peacekeepers?* Steyning, UK, 27 May 2008), 3–4, http://www.unifem. org/attachments/events/WiltonParkConference_Presentations_200805.pdf (accessed 14 April 2012).

128 Study cited in Lara Stemple, "Male Rape and Human Rights," *Hastings Law Journal* 60, no. 3 (2009): 612, http://devhector.uchastings.edu/hlj/archive/vol60/Stemple_60-HLJ-605.pdf (accessed 27 February 2012). See also Wynne Russell et al., "Care and Support of Male Survivors of Conflict-Related Sexual Violence," Sexual Violence Research Initiative, http://www.humansecuritygateway.com/documents/SVRI_Careand SupportofMaleSurvivorsofConflictRelatedSV.pdf (accessed 27 February 2012).

129 R. Charli Carpenter, "Recognizing Gender-Based Violence against Civilian Men and Boys in Conflict Situations," *Security Dialogue* 37, no. 1 (2006): 95, doi: 10.1177/0967010606064139 (accessed 27 February 2012).

130 The subsequent Council resolutions were 1820 (2008); 1888 (2009); 1889 (2009); and 1960 (2010). See UN Women, "Resolutions & Instruments," http://www.unifem.org/ gender_issues/women_war_peace/resolutions_instruments.php (accessed 19 June 2012).

131 United Nations Security Council, "Resolution 1325 (2000)," United Nations, 31 October 2000, 2, http://www.unfpa.org/women/docs/res_1325e.pdf (accessed 19 June 2012).

132 UN Security Council, *Women and Peace and Security: Report of the Secretary-General* (New York, NY: United Nations, 2010), 1, http://www.un.org/ga/search/view_doc.asp? symbol=S/2010/173 (accessed 14 April 2012).

133 Ibid., 4.

134 Ibid., 14.

135   Ibid., 11.

136   UN Security Council, "Resolution 1960 (2010)," 4, http://daccess-dds-ny.un.org/doc/
      UNDOC/GEN/N10/698/34/PDF/N1069834.pdf?OpenElement (accessed 14 April 2012).

137   UN, *Conflict-Related Sexual Violence*, 2. Emphasis added.

138   Ibid., 3.

139   Ibid. Aside from the information that UN field offices gather about incidents, the data
      collected may also include reports from rape survivors who present at clinics and
      hospitals.

140   Tia Palermo and Amber Peterman, "Undercounting, overcounting and the longevity of
      flawed estimates: statistics on sexual violence in conflict," *Bulletin of the World Health
      Organization* 89, no. 12 (2011), 925, doi: 10.2471/BLT.11.089888, http://www.who.int/
      bulletin/volumes/89/12/11-089888/en/index.html (accessed 14 April 2012). Emphasis
      added. Note that the DHS data on the number of rapes over a 12-month period likely
      include some cases of intimate-partner sexual violence (which are also measured
      separately with specific questions). But even with this caveat, the rate of rape indicated
      by the DHS data was clearly many times higher than that which the UN reported.

141   UN Security Council, *Report of the Secretary-General to the Security Council on the Protection
      of Civilians in Armed Conflict: S/1999/957* (New York, NY: United Nations, 1999), paragraph
      68, http://www.un.org/Docs/sc/committees/sanctions/s99957.pdf (accessed 14 April 2012).

142   Victoria Holt, Glyn Taylor, and Max Kelly, "Protecting Civilians in the Context of UN
      Peacekeeping Operations: Successes, Setbacks and Remaining Challenges," (New York,
      NY: United Nations, 2009), 4, http://www.peacekeepingbestpractices.unlb.org/pbps/
      Library/Protecting%20Civilians%20in%20the%20Context%20of%20UN%20PKO.pdf
      (accessed 14 April 2012).

143   Ibid., 8–9.

144   See Victoria Holt and Tobias C. Berkman, *The Impossible Mandate? Military Preparedness,
      the Responsibility to Protect and Modern Peace Operations* (Washington, DC: The Henry
      L. Stimson Center, 2006), 12, http://www.stimson.org/images/uploads/research-pdfs/
      Complete_Document-TheImpossible_Mandate-Holt_Berkman.pdf (accessed 14 April
      2012). It took three years for this report to go through the UN's vetting process and be
      published as the Holt, Taylor, and Kelly paper cited above.

145   Goetz, "Introduction," 5. Emphasis added. UN peacekeepers have themselves been guilty
      of sexual abuse of civilians. But the UN states that reports of such cases have declined.
      UN News Centre, "Sexual Abuse Allegations Decline against UN Peacekeepers in DR
      Congo and Liberia," 27 July 2011, http://www.un.org/apps/news/story.asp?NewsID=391
      64&Cr=peacekeeping&Cr1 (accessed 14 April 2012).

146   The Cohen data, for example, indicate that government forces are reported as perpetrators
      in more than three-quarters of the coded conflicts. In roughly 15 percent of conflicts
      government actors were reported to be solely responsible for very high levels of sexual
      violence. See Cohen, "Causes of Rape During Civil War," 51–52.

147 In her new book, *The Justice Cascade: How Human Rights Prosecutions Are Changing World Politics*, Kathryn Sikkink discusses statistical data to support her claims that prosecutions of past human rights violations deter future violations.

148 For further details, see UN Development Fund for Women (UNIFEM), UN Action against Sexual Violence in Conflict, and UN Department of Peacekeeping Operations (DPKO), *Addressing Conflict-Related Sexual Violence: An Analytical Inventory of Peacekeeping Practice* (New York: United Nations, 2010), http://www.unifem.org/attachments/products/ Analytical_Inventory_of_Peacekeeping_Practice_online.pdf (accessed 14 April 2012).

149 UN DPKO, "Protection of Civilians," http://www.un.org/en/peacekeeping/issues/civilians. html (accessed 14 April 2012).

150 See Chapter 4 in HSRP, *Human Security Report 2009/2010: The Causes of Peace and the Shrinking Costs of War* (New York: Oxford University Press, 2011), http://www.hsrgroup. org/human-security-reports/20092010/text.aspx (accessed 14 April 2012).

151 Ibid.

152 See, for example, Say NO—UNiTE to End Violence against Women, a social mobilization platform on ending violence against women and girls launched by UN Women. Say NO— UNiTE, "About Say NO," http://saynotoviolence.org/about-say-no (accessed 19 June 2012); WHO, *Addressing Violence against Women and Achieving the Millennium Development Goals* (Geneva, Switzerland: WHO, 2005), http://www.who.int/gender/documents/ MDGs&VAWSept05.pdf (accessed 19 June 2012); and WHO, "Violence against Women: Intimate Partner and Sexual Violence against Women," factsheet, September 2011, http:// www.who.int/mediacentre/factsheets/fs239/en/ (accessed 19 June 2012).

153 Goetz, "Introduction," 3. Emphasis in original.

154 Ibid., Emphasis added.

155 UN Entity for Gender Equality and the Empowerment of Women (UN Women), "Progress of the World's Women 2011–2012: In Pursuit of Justice: Executive Summary," (New York, NY: United Nations), 33, http://progress.unwomen.org/pdfs/EN-Report-Progress.pdf (accessed 14 April 2012).

156 UN Development Programme, *Third Consolidated Annual Progress Report on Activities Implemented under the UN Action against Sexual Violence in Conflict Fund*, Report of the Administrative Agent of the UN Action against Sexual Violence in Conflict Fund for the period 1 January—31 December 2011 (New York, NY: United Nations, 31 May 2012), 7, mdtf.undp.org/document/download/9099 (accessed 19 June 2012).

157 Physicians for Human Rights, *War-Related Sexual Violence in Sierra Leone: A Population-Based Assessment* (Boston, MA: Physicians for Human Rights, 2002), 61, https://s3.amazonaws. com/PHR_Reports/sierra-leone-sexual-violence-2002.pdf (14 April 2012).

158 WHO (World Health Organization), Claudia García-Moreno et al., *WHO Multi-country Study on Women's Health and Domestic Violence against Women*, (Geneva: WHO, 2005), 40, http://www.who.int/gender/violence/who_multicountry_study/en/ (accessed 23 August 2012).

159 Claudia García-Moreno et al., *WHO Multi-country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses*, (WHO, 2005), 28, http://www.who.int/gender/violence/who_multicountry_study/en/ (accessed 18 July 2012).

160 WHO, "Preventing Intimate Partner and Sexual Violence against Women: Taking Action and Generating Evidence," (Geneva: WHO, 2010), 29, http://www.who.int/violence_injury_prevention/publications/violence/9789241564007_eng.pdf, (accessed 14 April 2012).

161 Ibid.

162 For more detail, see ibid., 30–31.

163 The idea that rape is hard-wired into male psychology was the central focus of a controversial study by Randy Thornhill and Craig T. Palmer. See Randy Thornhill and Craig Palmer, *A Natural History of Rape: Biological Bases of Sexual Coercion* (Cambridge, MA: MIT Press, 2000). For a critique, see Jerry A. Coyne and Andrew Berry, "Rape as an Adaptation: Is This Contentious Hypothesis Advocacy, Not Science?" Nature 404, no. 6774 (2000): 121–122, doi: 10.1038/35004636 (accessed 13 July 2012). Note that even though Thornhill and Palmer believe that males have an innate predisposition to rape, they believe that the incidence of rape can be reduced through strategies that stress education and deterrence.

164 See, for example, WHO, "Changing Cultural and Social Norms that Support Violence," (Geneva: WHO, 2009), 8, http://www.who.int/violence_injury_prevention/violence/norms.pdf (accessed 14 April 2012).

165 Ibid., 3.

166 Celia W. Dugger, "Senegal Curbs a Bloody Rite for Girls and Women," *New York Times*, 15 October 2011, http://www.nytimes.com/2011/10/16/world/africa/movement-to-end-genital-cutting-spreads-in-senegal.html?_r=1&ref=senegal (accessed 14 April 2012).

167 Ibid.

168 There is, in fact, some evidence to suggest that the ban in 1999 led to higher numbers of cuttings, at least in the short run, and may have damaged the community-driven efforts. See Monica Antonazzo, "Problems with Criminalizing Female Genital Cutting," *Peace Review: A Journal of Social Justice* 15, no. 4, (2003): 474, http://www.tandfonline.com/doi/pdf/10.1080/1040265032000156663 (accessed 13 June 2012).

169 Dugger, "Senegal Curbs a Bloody Rite for Girls and Women."

170 Lori L. Heise, "What Works to Prevent Partner Violence? An Evidence Overview," STRIVE Research Consortium, London School of Hygiene and Tropical Medicine (London: LSHTM, 2011), 27–28, http://www.dfid.gov.uk/R4D/PDF/Outputs/Gender/60887-PartnerViolenceEvidenceOverview.pdf (accessed 14 April 2012).

171 Ibid., 28.

172 Ibid., 29.

173 WHO, "Promoting Gender Equality to Prevent Violence against Women: Overview," (Geneva: WHO, 2009), 1, http://whqlibdoc.who.int/publications/2009/9789241597883_eng.pdf (accessed 14 April 2012).

174 M. Caprioli, "Primed for Violence: The Role of Gender Inequality in Predicting Internal Conflict," *International Studies Quarterly* 49, no. 2 (2005): 161–178, doi: 10.1111/j.0020-8833.2005.00340.x (accessed 13 July 2012); and Erik Melander, "Gender Equality and Intrastate Armed Conflict," *International Studies Quarterly* 49, no. 4 (2005): 695–714, doi: 10.1111/j.1468-2478.2005.00384.x (accessed 13 July 2012).

175 Caprioli, "Primed for Violence," 171.

176 Melander, "Gender Equality and Intrastate Armed Conflict," 695.

177 James D. Fearon, "Governance and Civil War Onset: World Development Report 2011 Background Paper," (Washington, D.C.: World Bank, 2010), 35, http://wdr2011.worldbank.org/sites/default/files/pdfs/WDR%20Background%20Paper_Fearon_0.pdf?keepThis=true&TB_iframe=true&height=600&width=800 (accessed 14 April 2012).

178 Ibid., 36.

179 WHO, "Promoting Gender Equality," 1, 4.

180 World Bank, "Achieving Gender Equality at the Heart of MDGs," (Washington, D.C.: World Bank, 2010), http://data.worldbank.org/news/achieving-gender-equality-at-the-heart-of-mdgs (accessed 14 April 2012).

181 Heise, "What Works to Prevent Partner Violence?"

182 WHO, "Promoting Gender Equality," 4. See also R. B. Whaley and S. F. Messner, "Gender Equality and Gendered Homicides," *Homicide Studies* 6, no. 3 (2002): 188–210, doi: 10.1177/108876790200600302 (accessed 14 July 2012).

183 WHO, "Promoting Gender Equality," 9.

184 Heise, "What Works to Prevent Partner Violence?"

185 Heise, "What Works to Prevent Partner Violence?" 57–58; and Seema Vyas and Charlotte Watt, "How does economic empowerment affect women's risk of intimate partner violence in low and middle income countries? A systematic review of published evidence," *Journal of International Development* 21, no. 5, 577–602, doi: 10.1002/jid.1500 (accessed 14 July 2012).

186 See Chapter 4 in HSRP, *Human Security Report 2009/2010: The Causes of Peace and the Shrinking Costs of War* (New York: Oxford University Press, 2011), http://www.hsrgroup.org/human-security-reports/20092010/text.aspx (accessed 14 April 2012).

187 For a wide-ranging and comprehensive analysis of other campaigns to reduce partner violence, including sexual violence, see Heise, "What Works to Prevent Partner Violence?"

188 Dyan Mazurana and Khristopher Carlson, "The Girl Child and Armed Conflict: Recognizing and Addressing Grave Violations of Girls' Human Rights," United Nations Division for the Advancement of Women (DAW) in collaboration with UNICEF, 3, http://www.un.org/womenwatch/daw/egm/elim-disc-viol-girlchild/ExpertPapers/EP.12%20Mazurana.pdf (accessed 7 June 2012).

189 Note that Mazurana and Carlson claimed that their figures were for the "last decade," when the source of their data—a UNICEF report—actually refers to the time period 1986–1996. Kelly Greenhill, in her revealing essay that we cited in the previous chapter, refers to similar figures as one example of the kinds of myths that surround the impact of armed conflict. See Kelly M. Greenhill, "Counting the Cost: The Politics of Numbers in Armed Conflict," in *Sex, Drugs and Body Counts: The Politics of Numbers in Global Crime and Conflict*, ed. Peter Andreas and Kelly M. (Ithaca: Cornell University Press, 2010), 128–130.

190 Definitions of sexual violence against children are, in principle, the same as those against adults. We use the same definition for sexual violence used in Chapter 1 (see the box on page 23). But in some instances, particularly in advocacy reports, it is not always clear which definition is being used.

191 Jeanne Ward, Jackie Kirk, and Lisa Ernst, *Broken Bodies, Broken Dreams: Violence against Women Expose*d (Nairobi, Kenya: OCHA/IRIN, 2005), 19, http://www.irinnews.org/InDepthMain.aspx?InDepthId=59&ReportId=72831 (accessed 16 March 2012).

192 Office of the United Nations High Commissioner for Human Rights (OHCHR), Convention on the Rights of the Child, Part I, Article 1, http://www2.ohchr.org/english/law/crc.htm (accessed 7 June 2012).

193 Office of the Special Representative of the Secretary-General for Children and Armed Conflict, "The Changing Nature of Conflict," http://www.un.org/children/conflict/english/the-changing-nature-of-conflict.html (accessed 7 June 2012).

194 United Nations Department for Policy Coordination and Sustainable Development (DPCSD), *Promotion and Protection of the Rights of Children: Impact of War on Children*, Note by the Secretary-General United Nations DPCSD, http://www.unicef.org/graca/a51-306_en.pdf (accessed 18 June 2012). The formal title of the Machel report was *Impact of Armed Conflict on Children: Report of the expert of the Secretary-General, Ms. Graça Machel, submitted pursuant to General Assembly Resolution 48/157*, UN document A/51/306, New York, 26 August 1996.

195 The term "new war" derived from Mary Kaldor's *New and Old Wars: Organized Violence in a Global Era. Mary Kaldor, New & Old Wars*, 2nd ed. (Cambridge [England]; Malden, MA: Polity Press, 2006).

196 DPCSD, "Promotion and Protection of the Rights of Children," 5. The Machel report foreshadowed the claims of so-called new war scholars that there had been a fundamental change in the nature of armed conflict.

197 Office of the Special Representative of the Secretary-General for Children and Armed Conflict,"Introduction,"http://www.un.org/children/conflict/english/issues.html (accessed 7 June 2012).

198 Office of the Special Representative of the Secretary-General for Children and Armed Conflict,"Engagement of Security Council on Children and Armed Conflict,"http://www.un.org/children/conflict/english/security-council.html (accessed 7 June 2012).

199 Alastair Ager, Neil Boothby, and Megan Bremer, "Using the 'protective environment' framework to analyse children's protection needs in Darfur," *Disasters* 33, no. 4 (2009): 567, doi: 10.1111/j.0361-3666.2008.01087.x (accessed 20 August 2012).

200 See Care and Protection of Children in Crisis Affected Countries Initiative Program on Forced Migration and Health, *Care and Protection of Children in Crisis Affected Countries: A Good Practice—Policy Change Initiative* (New York: CPC, 2006), 17, http://www.forcedmigration.columbia.edu/research/documents/CPCSynthesisReport2008.pdf (accessed 22 August 2012).

201 Cited in ibid, 17.

202 See Greenhill,"Counting the Cost,"128–130.

203 See UNICEF, *Machel Study 10-Year Strategic Review: Children and Conflict in a Changing World* (New York: Office of the Special Representative of the Secretary-General for Children and Armed Conflict; UNICEF, 2009), http://www.un.org/children/conflict/_documents/machel/msr2_en.pdf (accessed 7 June 2012).

204 Ibid., 8.

205 The overall level of violence declined substantially, which—all else equal—should result in a lesser impact on children. From the 1990s to the 2000s, total death tolls from state-based conflict, non-state conflict, and one-sided violence decreased by 45, 24, and 49 percent, respectively (we exclude one-sided violence in Rwanda here to avoid skewing the result).

206 For example, the Office of the Special Representative of the Secretary-General for Children and Armed Conflict continues to refer to the "new wars" on its website. See "The Changing Nature of Conflict," (accessed 13 July 2012).

207 Kaldor, *New & Old Wars*.

208 Ibid., 107.

209 UN Population Division, Department of Economic and Social Affairs, *World Population Prospects: The 2010 Revision*, http://esa.un.org//wpp/Excel-Date/population.htm (accessed 11 June 2012).

210 Human Security Centre, *Human Security Report 2005: War and Peace in the 21st Century* (New York; Oxford: Oxford University Press, 2005), 75, http://www.hsrgroup.org/human-security-reports/2005/text.aspx (accessed 7 June 2012).

211 Erik Melander, Magnus Oberg, and Jonathan Hall, "Are 'New Wars' More Atrocious? Battle Severity, Civilians Killed and Forced Migration before and after the End of the Cold War," *European Journal of International Relations* 15, no. 3 (2009), 529, doi: 10.1177/1354066109338243 (accessed 22 August 2012).

212 Notable critiques of the new wars thesis include Mats Berdal, "How 'New' are 'New Wars'? Global Economic Change and the Study of Civil War," *Global Governance* 9 (2003); Stathis N. Kalyvas, "'New' and 'Old' Civil Wars: A Valid Distinction?" *World Politics* 54, no. 01 (2001), doi: 10.1353/wp.2001.0022 (accessed 7 June 2012); and Edward Newman, "The 'New Wars' Debate: A Historical Perspective Is Needed," *Security Dialogue* 35, no. 2 (2004), doi: 10.1177/0967010604044975 (accessed 7 June 2012).

213 For data on the decline in genocides, see Human Security Centre, *Human Security Report 2005*, 41.

214 See endnote 18.

215 Office of the Special Representative of the Secretary-General for Children and Armed Conflict, "Rape and Other Grave Sexual Violence against Children," http://www.un.org/children/conflict/english/sexualviolence.html (accessed 7 June 2012). Emphasis added.

216 There will clearly be individual conflicts in which levels of sexual violence have increased; our concern, however, is with overall trends.

217 UN Security Council, "Security Council Establishes Monitoring, Reporting Mechanism on Use of Child Soldiers, Unanimously Adopting Security Council Resolution 1612 (2005)," news release, 26 July 2005, http://www.un.org/News/Press/docs/2005/sc8458.doc.htm (accessed 31 July 2012).

218 Watchlist on Children and Armed Conflict, *Getting It Done and Doing It Right: A Global Study on the United Nations-led Monitoring & Reporting Mechanism on Children and Armed Conflict* (New York: Watchlist on Children and Armed Conflict, 2008), 18, http://www.watchlist.org/reports/pdf/global-v8-web.pdf (accessed 31 July 2012).

219 Even well-run surveys will underestimate the extent of sexual violence, especially if respondents are not given the opportunity of answering questions anonymously. But the degree of underestimation is still far less than with the type of reporting undertaken by the MRM task forces.

220 Office of the Special Representative of the Secretary-General for Children and Armed Conflict, UNICEF, and Department of Peacekeeping Operations (DPKO), *Monitoring and Reporting Mechanism (MRM) on Grave Violations against Children in Situations of Armed Conflict: MRM Field Manual,* http://s3.amazonaws.com/tdh_e-platform/assets/147/original/MRM_Field_Manual_16-04-10.pdf?1309159505 (accessed 7 June 2012).

221 Because these studies have recall periods of 10 years or more, some of the adult respondents may have been children when they were violated, but the data are not disaggregated to reveal the prevalence of sexual violence against children.

222 Two questions in the module are critical here for information on sexual violence against children in wartime. First, women respondents are asked, "How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts?" Answers to this question will determine what percentage of females experienced sexual violence while still children—and at what age. A follow-up question asks about the identity of the perpetrator. These data could be used to derive a conservative estimate of the percentage of the under-age population that had experienced sexual violence, and who the perpetrators were—family members or acquaintances (most likely), or soldiers and other members of the security forces. This would, however, still underestimate the extent of sexual violence, especially if respondents were not given the opportunity to answer questions anonymously. See DHS, "Domestic Violence Module: Questionnaire and Interviewer's Manual," 3 January 2011, 5, http://www.measuredhs.com/pubs/pdf/ DHSQM/DHS6_Module_Domestic_Violence_3Jan2011.pdf (accessed 23 August 2012).

223 The UNICEF surveys can include optional modules that collect data on *child discipline*— i.e., physical violence against young children—and on adult *attitudes* towards the use of disciplinary force against children, but nothing on sexual violence. See UNICEF, "Multiple Indicator Cluster Surveys: Questionnaires and Indicator List," April 2012, http://www. childinfo.org/mics4_questionnaire.html (accessed 23 August 12).

224 See Marije Stoltenborgh et al., "A Global Perspective on Child Sexual Abuse: Meta-Analysis of Prevalence Around the World," *Child Maltreatment* 16, no. 2 (2011): 79–101, doi: 10.1177/1077559511403920 (accessed 7 June 2012).

225 See ibid., 84.

226 Ibid., 83, 88.

227 See Stoltenborgh et al., "A Global Perspective on Child Sexual Abuse," 87, 89.

228 Claudia García-Moreno et al., *WHO Multi-Country Study on Women's Health and Domestic Violence against Women: Initial Results on Prevalence, Health Outcomes and Women's Responses* (Geneva: WHO, 2005), 3, xiv, http://www.who.int/gender/violence/who_ multicountry_study/en/ (accessed 18 July 2012)

229 Ibid., 50.

230 In addition to being asked directly if they had experienced sexual violence before they were 15, the women could respond anonymously by placing the answer in a sealed envelope.

231 WHO (World Health Organization), Claudia García-Moreno et al., *WHO Multi-country Study on Women's Health and Domestic Violence against Women*, (Geneva: WHO, 2005), 50, http://www.who.int/gender/violence/who_multicountry_study/en/ (accessed 23 August 2012).

232 UNICEF, *Machel Study 10-Year Strategic Review*, 161.

233 Unpublished data provided by the WHO based on García-Moreno et al., *WHO Multi-Country Study on Women's Health and Domestic Violence against Women*.

234 There are only two sites where the rate of sexual violence against children was shown to be higher than that against adults.

235 Ibid., 50. The 33-percent figure for adults is high. We should, however, expect that the data broadly reflect the difference in prevalence rates between adults and children.

236 Unpublished data provided by the WHO (World Health Organization) based on García-Moreno et al., *WHO Multi-Country Study on Women's Health and Domestic Violence against Women*.

237 *Neighbourhood surveys* are so called because interviewers solicit information from female heads of households, not only about their own experience of sexual violence and that of other females in the household but also of the experience of women in three neighbouring households. This has the effect of increasing the sample size of the population being surveyed, but there is no guarantee that the single respondent's estimate of sexual violence in other households will be correct. For more information on neighbourhood surveys, see Child Protection in Crisis Network for Research, Learning and Action, "Neighbourhood Method," http://www.cpcnetwork.org/neighborhood-method.php (accessed 7 June 2012).

238 Birthe Steiner et al., "Sexual Violence in the Protracted Conflict of DRC Programming for Rape Survivors in South Kivu," *Conflict and Health* 3, no. 1 (2009) doi: 10.1186/1752-1505-3-3 (accessed 7 June 2012).

239 UN Population Division, *World Population Prospects: The 2010 Revision, Population Database*, http://esa.un.org/unpd/wpp/unpp/panel_population.htm (accessed 18 July 2012) and http://esa.un.org/wpp/Excel-Data/population.htm (accessed 11 June 2012).

240 This was done only for a short period from October to December 2005.

241 Luc Malemo Kalisya et al., "Sexual Violence toward Children and Youth in War-Torn Eastern Democratic Republic of Congo," *PLoS ONE* 6, no. 1 (2011), Table 1, doi: 10.1371/journal.pone.0015911 (accessed 19 July 2012).

242 For the very small number of adult victims included in the Kalisya et al. study, the data show a high share of rape by strangers and perpetrators in military uniform (70 percent and 48 percent, respectively). Note that these figures are based on a total of only 54 adult cases, as opposed to the 440 "pediatric victims." See ibid., 3.

243 Child Protection in Crisis Network, "Neighbourhood Method."

244 Birthe Steiner et al., "Sexual Violence in the Protracted Conflict of DRC Programming for Rape Survivors in South Kivu," *Conflict and Health* 3, no. 3 (2009): 7, doi: 10.1186/1752-1505-3-3 (accessed 7 June 2012).

245 Braeden Rogers et al., "Estimating the Incidence of Physical and Sexual Violence against Children and Women in Trincomalee District, Sri Lanka: The Neighbourhood Method," 14 January 2009, Heilbrunn Department of Population and Family Heath, Program on Forced Migration and Health, Mailman School of Public Health, Columbia University/Save The Children, 18, http://www.cpcnetwork.org/learning-details.php?ID=1 (accessed 21 June 2012).

246 Ibid., 27. The two cases of rape of girls recorded in the survey were both perpetrated by family members, but the total number is too low to be meaningful. See ibid., 23.

247 Angela Parcesepe, Lindsay Stark, and Les Roberts, "Using the Neighbourhood Method to Measure Violence and Rape in Ethiopia," Heilbrunn Department of Population and Family Heath, Program on Forced Migration and Health, Mailman School of Public Health, Columbia University, 11, http://www.cpcnetwork.org/neighborhood-method. php (accessed 18 July 2012).

248 Ibid., 17.

249 Ann Warner, "Incidence of Violence against Women and Girls in Liberia: A Quantitative Study Using the 'Neighborhood Method,'" International Rescue Committee; Program on Forced Migration and Health, Mailman School of Public Health, Columbia University, 7, http://www.forcedmigration.columbia.edu/research/documents/IRCReportonNeighbor hoodStudy_10-1-07.pdf (accessed 18 June 2012).

250 Ibid., 11–12.

251 Kathleen Myer, Alina Potts, and Les Roberts, "Grave Violations of Children's Rights and Mortality in the Central African Republic: Results of a Nationwide Survey," Heilbrunn Department of Population and Family Heath, Program on Forced Migration and Health, Mailman School of Public Health, Columbia University, 13, http://www.forcedmigration. columbia.edu/research/documents/CAR_1612_Survey_Report_17Sep09_FOR DISTRIBUTION.pdf (accessed 18 June 2012).

252 Ibid.

253 See Lindsay Stark et al., "Measuring Violence against Women amidst War and Displacement in Northern Uganda Using the 'Neighborhood Method,'" *Journal of Epidemiology & Community Health* 64 (2010): 1056–1061, doi: 10.1136/jech.2009.093799 (accessed 20 July 2012).

254 As Elisabeth Wood has argued, differences in the rate of rape committed by armed groups may also be determined by antisexual violence policies pursued by military authorities. However, there is insufficient cross-national data to determine the extent to which such policies have been implemented outside the relatively small number of case studies that have been carried out thus far. See Elisabeth J. Wood, "Armed Groups and Sexual Violence: When Is Wartime Rape Rare?" *Politics & Society* 37, no. 1 (2009): 131–161, doi: 10.1177/0032329208329755 (accessed 22 August 2012).

255 See Stoltenborgh et al., "A Global Perspective on Child Sexual Abuse," 89.

256 This is not to say that the MRM has no utility—simply that it is not useful for measuring trends in conflict-related sexual violence against children. For a description of the MRM and some of its roles, see Watchlist on Children and Armed Conflict, *Getting It Done and Doing It Right* (accessed 18 June 2012).

257 UN Statistical Commission, "Proposed Draft Outline for the Guidelines for Producing Statistics on Violence against Women, Part I: Statistical Survey," 3, http://unstats.un.org/ unsd/demographic/meetings/vaw/docs/Item13.pdf (accessed 18 June 2012).

CHAPTER 4

258 Brian Lai and Clayton Thyne, "The Effect of Civil War on Education, 1980–97," *Journal of Peace Research* 44, no. 3 (2007): 289, doi: 10.1177/0022343307076631 (accessed 18 July 2012).

259 Marc Sommers, *Children, Education, and War: Reaching Education for All* (EFA) *Objectives in Countries Affected by Conflict*, Conflict Prevention and Reconstruction Unit (CPR) Working Papers 1 (Washington, DC: World Bank, 2002), Introduction, http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/children_edu_war_efa02.pdf (accessed 18 July 2012).

260 United Nations Educational, Scientific and Cultural Organization (UNESCO) Education for All (EFA) Global Monitoring Report Team, *The Hidden Crisis: Armed Conflict and Education* (Paris: UNESCO, 2011), 13, http://unesdoc.unesco.org/images/0019/001907/190743e.pdf (accessed 4 September 2012).

261 See Paul Collier, *Breaking the Conflict Trap: Civil War and Development Policy* (Washington, DC; New York: World Bank; Oxford University Press, 2003).

262 UNESCO Institute for Statistics (UIS), "The Quantitative Impact of Conflict on Education," UIS technical paper no. 7 (Montreal: UIS, 2011), http://www.uis.unesco.org/Library/Documents/tp7-quantitative-armed-conflict-impact-education-2011-en.pdf (accessed 18 July 2012).

263 EPDC, "How Do Violent Conflicts Affect School Enrolment? Analysis of Sub-National Evidence from 19 Countries" (Geneva: UNESCO, 2010), background paper prepared for the *Education for All Global Monitoring Report 2011—The Hidden Crisis: Armed Conflict and Education*, http://unesdoc.unesco.org/images/0019/001912/191248e.pdf (accessed 21 July 2012).

264 See Chapter 6 of Human Security Report Project (HSRP), *Human Security Report 2009/2010: The Causes of Peace and the Shrinking Costs of War* (New York: Oxford University, 2011), http://www.hsrgroup.org/human-security-reports/20092010/overview.aspx (accessed 13 September 2012). Note that the period studied was 1970 to 2008.

265 Scott Gates et al., "Consequences of Civil Conflict," *World Development Report 2011* Input Paper, World Bank, http://wdr2011.worldbank.org/PRIO (accessed 19 July 2012). A shortened and revised version of this study was published in September 2012. See Scott Gates et al., "Development Consequences of Armed Conflict, "*World Development* 40, no. 9: 1713–1722, doi: 10.1016/j.worlddev.2012.04.031 (accessed 14 September 2012).

266 UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education; EPDC, How Do Violent Conflicts Affect School Enrolment?"

267 Gates et al., "Consequences of Civil Conflict."

268 "Descriptive statistics"include the tables, charts and graphics used to describe, summarize and graphically present raw statistical data. They help summarize and support factual claims and are much easier to understand than the raw data.

269 Econometric studies may choose to exclude select countries where including them in the analysis would distort the results. The PRIO study, for example, excluded a number of developed countries, such as the UK, which experienced a small conflict in Northern Ireland. Development indicators in such highly industrialized countries are unlikely to improve significantly. See Scott Gates et al., "Consequences of Civil Conflict," 5.

270 *Regression analysis* seeks to determine associations between different phenonoma, with the assumption usually being that the association indicates an "average" causal effect.

271 Gates et al., "Consequences of Civil Conflict," 13.

272 Most of these statistics are from the Households in Conflict Network (HiCN), which has published studies on education and conflict in Burundi, Tajikistan, Nepal, Timor Leste, and Bosnia. See HiCN, "About," http://www.hicn.org/papers.html/ (accessed 21 July 2012). See also Francis Akena Adyanga, *The Catastrophe of Education in Civil War Areas, Uganda: The Impact of Civil War on Education: A Case Study of Acholiland, Northern Uganda* (Saarbrucken, Germany: Lambert Academic Pub., 2010); Avis Sri-Jayantha, "Impact of War on Children in Sri Lanka," Association of Tamils of Sri Lanka in the USA, http://www.sangam.org/ANALYSIS/Children_1_28_03.htm (accessed 21 July 2012); and Kate Wharton and Ruth U. Oyelere, "Conflict and Its Impact on Educational Accumulation and Enrollment in Colombia: What We Can Learn from Recent IDPs," Institute for the Study of Labor (IZA), http://www.iza.org/en/webcontent/publications/papers/viewAbstract?dp_id=5939 (accessed 21 July 2012).

273 World Bank, *Reshaping the Future: Education and Postconflict Reconstruction* (Washington, DC: World Bank, 2005), xi, http://siteresources.worldbank.org/INTCPR/Resources/Reshaping_the_Future.pdf (accessed 21 July 2012). Note that no sources were provided for these claims.

274 World Bank, *Reshaping the Future*, 13.

275 Ibid., 13, 22.

276 Internal Displacement Monitoring Centre (IDMC), "Internally Displaced Children," http://www.internal-displacement.org/8025708F004D404D/(httpPages)/6E780F0E0FE6BA1AC1257214003D980E?OpenDocument (accessed 21 July 2012).

277 United Nations High Commissioner for Refugees (UNHCR), *Global Trends 2010: 60 Years and Still Counting* (Geneva: United Nations, 2011), http://www.unhcr.org/4dfa11499.html (accessed 21 July 2012).

278 UNESCO, "Conflict Is Robbing 28 Million Children of a Future, UNESCO Report Warns," News Release, 1 March 2011, http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/gmr2011-press-release-main.pdf (accessed 21 July 2012).

279 UNESCO, "Education Under Attack 2010—Iraq," http://www.unhcr.org/refworld/docid/4b7aa9df5.html (accessed 21 July 2012).

280 Brendan O'Malley, *Education Under Attack 2010* (Paris: UNESCO, 2010), 43, http://unesdoc.unesco.org/images/0018/001868/186809e.pdf (accessed 21 July 2012).

281 Ibid.

282 World Bank, *Reshaping the Future*, 17.

283 Bede Sheppard and Kyle Knight, "Disarming Schools: Strategies for Ending the Military Use of Schools during Armed Conflict," *Disarmament Forum* 2011, no. 3 (2011): 23, http://unidir. org/bdd/fiche-periodique.php?ref_periodique=1020-7287-2011-3-en#biblio (accessed 21 July 2012).

284 Christopher Blattman and Jeannie Annan, "The Consequences of Child Soldiering," *Review of Economics and Statistics* 92, no. 4 (2010): 882–898, doi: 10.1162/REST_a_00036 (accessed 21 July 2012).

285 World Bank, *Reshaping the Future*, 18–19.

286 UN, "Millennium Development Goals: Goal 2: Achieve Universal Primary Education—Fact Sheet," http://www.un.org/millenniumgoals/pdf/MDG_FS_2_EN.pdf (accessed 21 July 2012).

287 Julia Paulson and Jeremy Rappleye, "Education and Conflict: Essay Review," *International Journal of Educational Development* 27, no. 3 (2007): 341, doi: 10.1016/j.ijedudev.2006.10.010 (accessed 21 July 2012).

288 UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education."

289 Note that the study does not measure directly a country's overall national attainment rate but rather the educational attainments of cohorts of 15-year-olds at given points in time. We describe this indicator more fully below.

290 See UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 13, for a detailed description of the methodology used by the UIS researchers—and some cautions about the conclusions that can be drawn from the data analysis. The conflict data come from PRIO and the Uppsala University Conflict Data Program (UCDP). The graphics in the study show periods of both minor conflict (in yellow) and major conflict (referred to as "war" here). *Major conflicts* or *wars* are those that incur 1,000 or more battle deaths in a calendar year.

291 In addition, the researchers also grouped the respondents in cohorts of 13- to 17-year-olds to smooth year-to-year fluctuations.

292 The data used in the UIS report can serve as an indicator of the effect of conflict on education, but as the authors note, they do not directly "reveal the educational attainment of 15 year-olds … at any time in the past." See UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 13 (accessed 4 September 2012).

293 Ibid., 7.

294 Ibid.

295 The figures derived from the UIS study that are presented here do not extend as far in time as the UIS graphics. This is because, as the UIS report's authors explain, data immediately prior to the time of the survey are distorted. This is very evident in the UIS graphics, which all reveal a sharp decline in educational outcomes prior to, and following, the survey date. To avoid misinterpretation, the graphics used here only extend the year that is nine years *prior* to the year in which the survey was undertaken. This is the maximum period over which the UIS researchers believe the distortion will be evident.

296 To be more precise, the Kurdish areas had a greater percentage of individuals with no formal education than the rest of Turkey.

297 By the time the conflict started, only a very small percentage of those living in the areas of Turkey not directly affected by war had received no education at all, which means that there was little room for improvement on this measure. But the counterintuitive process of educational attainments improving more rapidly in war-affected areas than in those that are not directly affected is evident in other graphs in the UIS study.

298 UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 27 (Figure 4.6) (accessed 4 September 2012).

299 The UIS study did not examine the differences between war-affected and non-war-affected areas in all the countries it reviewed.

300 UNESCO Institute for Statistics (UIS), "The Quantitative Impact of Conflict on Education," UIS technical paper no. 7 (Montreal: UIS, 2011), http://www.uis.unesco.org/Library/Documents/tp7-quantitative-armed-conflict-impact-education-2011-en.pdf (accessed 18 July 2012).

301 Attainment rates for women were broadly similar but from a lower base than males, and the attainment rate for women in the conflict zones, unlike for males, lagged somewhat behind the attainment rate for women in the non-conflict zones. UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 38–40 (accessed 4 September 2012).

302 Exceptions were periods of violence in the 1960s and 1980s, during which the average years of education followed an unsteady, but largely stagnant, pre-war trend.

303 See UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 45 (Figure 8.5) (accessed 4 September 2012).

304 The data for the male population without formal education represented an exception here, as it deteriorated during the 1970s but then caught up again with the trend in the rest of the country.

305 It could also mean that the negative impact of conflict on the rate of educational attainment is being offset by the positive impact of some other factor—e.g., rising incomes or improved educational attainment among girls.

306 UNESCO Institute for Statistics (UIS), "The Quantitative Impact of Conflict on Education," UIS technical paper no. 7 (Montreal: UIS, 2011), http://www.uis.unesco.org/Library/Documents/tp7-quantitative-armed-conflict-impact-education-2011-en.pdf (accessed 18 July 2012).

307 Andrew Mack, "Armed Conflicts," Perspective Paper, Copenhagen Consensus 2012, http://www.copenhagenconsensus.com/Files/Filer/CC12%20perspective%20papers/Armed%20Conflicts__Mack.pdf (accessed 21 July 2012).

308 See UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 66 (Figure 9.20) (accessed 4 September 2012).

309 EPDC, "How Do Violent Conflicts Affect School Enrolment?"

310 This refers to 10 countries that experienced conflict in 2010 and for which conflict-affected as well as peaceful regions could be identified. See ibid., 2 (accessed 4 September 2012).

311 Ibid., 1 (accessed 4 September 2012).

312 Ibid. (accessed 4 September 2012).

313 Ibid., 2 (accessed 4 September 2012).

314 See the methodology section of ibid., 6–8 (accessed 4 September 2012).

315 The countries in question are Burma, Burundi, Chad, Indonesia, Liberia, the Philippines, Sierra Leone, and Sudan. In the case of Sierra Leone, there was trend data but no period of conflict; in the case of Chad, trend data existed only for the nonconflict region.

316 Note that for most of these countries, only two data points are available, or there are only data for the conflict period, which means that we cannot compare values for all periods, i.e., before, after, and during the conflict.

317 EPDC, "How Do Violent Conflicts Affect School Enrolment?" 27 (accessed 4 September 2012).

318 In addition, Ethiopia also shows increases in attendance rates. The EPDC does not show conflict periods in its Ethiopia graph covering the years 2000–2009. According to UCDP/PRIO data, however, the country continuously experienced conflict during that time period.

319 The countries in question are Burma, Burundi, Chad, Indonesia, Liberia, the Philippines, Senegal, Sierra Leone and Uganda.

320 Gross attendance rates can be more than 100 percent, because in addition to the regular cohort of children, they include children older than the cohort who previously missed a year or more of education.

321 Education Policy and Data Center (EPDC), *How do Violent Conflicts Affect School Enrolment? Analysis of Sub-National Evidence from 19 Countries* (Geneva: UNESCO, 2010), Background paper prepared for the *Education for All Global Monitoring Report 2011—The Hidden Crisis: Armed Conflict and Education*, 12, http://unesdoc.unesco.org/images/0019/001912/191248e.pdf (accessed 21 July 2012); Uppsala Conflict Data Program (UCDP), Uppsala University, Uppsala, Sweden/Center for the Study of Civil War, International Peace Research Institute Oslo, (PRIO).

322 See Ray Rivera and Taimoor Shah, "Taliban Attacks on Afghan Schools Lessen," *SFGate*, 9 June 2011, http://www.sfgate.com/world/article/Taliban-attacks-on-Afghan-schools-lessen-2368869.php (accessed 21 July 2012).

323 Education Policy and Data Center (EPDC), *How do Violent Conflicts Affect School Enrolment? Analysis of Sub-National Evidence from 19 Countries* (Geneva: UNESCO, 2010), Background paper prepared for the *Education for All Global Monitoring Report 2011 - The Hidden Crisis: Armed Conflict and Education,* 21, http://unesdoc.unesco.org/images/0019/001912/191248e.pdf (accessed 21 July 2012); Uppsala Conflict Data Program (UCDP), Uppsala University, Uppsala, Sweden/Center for the Study of Civil War, International Peace Research Institute Oslo, (PRIO).

324 World Bank, "In Afghanistan, Out of Conflict and Into School," http://web.worldbank.org/WBSITE/EXTERNAL/TOPICS/EXTEDUCATION/0,,contentMDK:20279607~menuPK:617572~pagePK:148956~piPK:216618~theSitePK:282386,00.html (accessed 30 August 2012).

325 However, as we pointed out previously, the limited evidence we have suggests that these outcomes usually precede the conflict.

326 Adding deaths caused by the intentional killing of civilians for the period covered by the survey does not significantly alter the average. If death tolls in minor conflicts are so low that the impact that they make on educational outcomes is not discernible, it might be useful to focus on high-intensity conflicts only. This is what we did in our analysis of under-five mortality in the last *Human Security Report*, where only *wars*—conflicts in which there were a reported 1,000 or more battle deaths in a calendar year—were included. The findings were very similar for both intensity levels. This time we include minor conflicts, primarily because the UIS and EPDC studies that we review include minor conflicts as well as wars in their analyses.

327 Education Policy and Data Center (EPDC), *How do Violent Conflicts Affect School Enrolment? Analysis of Sub-National Evidence from 19 Countries* (Geneva: UNESCO, 2010), Background paper prepared for the *Education for All Global Monitoring Report 2011—The Hidden Crisis: Armed Conflict and Education,* 15, http://unesdoc.unesco.org/images/0019/001912/191248e.pdf (accessed 21 July 2012); Uppsala Conflict Data Program (UCDP), Uppsala University, Uppsala, Sweden/Center for the Study of Civil War, International Peace Research Institute Oslo, (PRIO).

328 Education Policy and Data Center (EPDC), *How do Violent Conflicts Affect School Enrolment? Analysis of Sub-national Evidence from 19 Countries,* (Geneva: UNESCO, 2010), Background paper prepared for the *Education for All Global Monitoring Report 2011—The Hidden Crisis: Armed Conflict and Education,* 15, http://unesdoc.unesco.org/images/0019/001912/191248e.pdf (accessed 21 July 2012); Uppsala Conflict Data Program (UCDP), Uppsala University, Uppsala, Sweden/ Human Security Report Project, School for International Studies, Simon Fraser University, Vancouver, Canada.

329 Gratien Mokonzi Bambanota and Mwinda Kadongo, *Democratic Republic of Congo: Effective Delivery of Public Services in the Education Sector: A Study* (Johannesburg, South Africa: Open Society Initiative for Southern Africa, 2010), 4, doi: 10.1177/00223433030405006 (accessed 21 July 2012).

330 Bambanota and Kadongo, *Democratic Republic of Congo: Effective Delivery of Public Services in the Education Sector*, 19 (accessed 30 August 2012).

331 Ibid. (accessed 30 August 2012).

332 The light blue South Kivu trend line is that which has the highest attendance rate in 2007 of the three secondary conflict region trend lines.

333 Lisa Bender, *Innovations in Emergency Education: The IRC in the Democratic Republic of Congo* (Geneva: UNESCO, 2009), commissioned background report prepared for the *Global Monitoring Report*, 3, http://ddp-ext.worldbank.org/EdStats/ZARgmrpap10.pdf (accessed 21 July 2012).

334 IDMC, "Democratic Republic of Congo: IDPs Need Further Assistance in Context of Continued Attacks and Insecurity," http://www.internal-displacement.org/countries/drcongo (accessed 22 July 2012).

335 UNESCO Institute for Statistics, "The Quantitative Impact of Conflict on Education," 7 (accessed 4 September 2012).

336 EPDC, "How Do Violent Conflicts Affect School Enrolment?" 31 (accessed 4 September 2012). Emphasis added.

337 See ibid., 6–8 (accessed 4 September 2012) for a discussion of all EPDC's methodological concerns.

338 Ibid., 7 (accessed 4 September 2012).

339 In the Central African Republic there are only data for the two secondary conflict regions. In 2006 the primary conflict region was not surveyed. It is possible that the primary conflict region saw a decline, but both of the secondary conflict areas witnessed an appreciable *improvement* in educational outcomes in this period, as seems to be the case for all the other regions. In Uganda parts of the Northern and Western regions were omitted from the survey in 2001. However, this is unlikely to change the main finding much, since the data already show a decline in educational attainments for most of the period. Several areas of Indonesia were missed from the survey, but there were only data for one year on Indonesia so they are not discussed here. The same is the case with Sudan. In the cases of Pakistan and Colombia, there were missing data, but the EPDC states that the omission is unlikely to have affected the overall results in either case.

340 EPDC, "How Do Violent Conflicts Affect School Enrolment?", 6 (accessed 4 September 2012).

341 The terms *effect* and *impact*—which imply causality—are used both in this *Report* and in most other studies. Strictly speaking, we should be referring to an *association* between conflict and educational outcomes.

342 The PRIO study uses both cross-section and fixed-effects models, but the authors believe the latter are more appropriate (HSRP correspondence with Håvard Mokleiv Nygård, 29 May 2012). See Gates et al., "Consequences of Civil Conflict," 1. Cited earlier in the chapter, the updated Gates et al., "Development Consequences of Armed Conflict" corrects a minor error in the version that is cited here.

343 Gates et al., "Consequences of Civil Conflict," 40.

344 Ibid., 43.

345 Scott Gates et al., "Consequences of Civil Conflict," *World Development Report 2011* Input Paper (Washington, D.C.: World Bank, 2010): 41, http://wdr2011.worldbank.org/PRIO (accessed 19 July 2012).

346 Siyan Chen, Norman V. Loayza, and Marta Reynal-Querol, "The Aftermath of Civil War," *The World Bank Economic Review* 22, no. 1 (2008): 63–85, doi: 10.1093/wber/lhn001 (accessed 14 September 2012). In this study, conflict periods sometimes included shorter interwar peace periods (fewer than 10 years).

347 Lai and Thyne, "The Effect of Civil War on Education," 277 (accessed 4 September 2012).

348 Ibid., 284 (accessed 4 September 2012).

349 EPDC, "How Do Violent Conflicts Affect School Enrolment?" 6 (accessed 4 September 2012).

350 The *World Bank Economic Review* study has a considerable smaller number of countries than the PRIO and Lai and Thyne studies, meaning that its findings are likely a less reliable guide of the overall effect of war on education.

351 There is also the possibility, canvassed by Lai and Thyne themselves, that the positive relationship that they find between conflict and low educational outcomes is affected by the omitted variable bias discussed above—i.e., that the association between war and educational outcomes that they report could be caused by factors that were not included in their statistical models. See Lai and Thyne, "The Effect of Civil War on Education," 277 (accessed 4 September 2012) 289.

352 For a discussion of the differences in results in the literature on civil war onset, see Håvard Hegre and Nicholas Sambanis, "Sensitivity Analysis of Empirical Results on Civil War Onset," *Journal of Conflict Resolution* 50, no. 4 (2006): 508–535, doi: 10.1177/0022002706289303 (accessed 4 September 2012).

353 We reiterate a cautionary note here. The trends that we have been describing are averages—what is *generally* the case and certainly not what is *always* the case. The averages will, of course, include many cases where war does indeed have disastrous impacts on educational outcomes. These cases are the ones that receive the most attention from policy-makers, that generate the headlines, and that inform the mainstream narrative. Those cases where educational outcomes improve in conflicts at a more rapid rate than the average get no attention.

354 UNESCO EFA Global Monitoring Report Team, *The Hidden Crisis*, 126.

355 Ibid., 159.

356 Ibid.

357 However, even if conflict is *not* the primary cause of low educational outcomes in war-affected countries, it may well exacerbate them.

358 The nonconflict fragile states in the PRIO study have consistently lower educational attainments than those in conflict. See Gates et al., "Consequences of Civil Conflict," 41.

359 See INEE, http://www.ineesite.org/ (accessed 4 September 2012) and INCAF, http://www.oecd.org/dac/conflictandfragility/44282247.pdf (accessed 4 September 2012).

360 Some of the research of the INEE focuses on fragility in explaining educational and other development outcomes. See INEE, http://www.ineesite.org/ (accessed 4 September 2012). For an overview of the concept of state fragility as it applies to education, see Jacqueline Mosselson, Wendy Wheaton, and Paul St. John Frisoli, "Education and Fragility: A Synthesis of the Literature," *Journal of Education for International Development* 4, no. 1 (2009).

361 Monty G. Marshall and Benjamin R. Cole, *Global Report 2011: Conflict, Governance, and State Fragility* (Vienna, VA: CSP, 2011), 21, http://www.systemicpeace.org/GlobalReport2011.pdf (accessed 4 September 2012). The total global fragility score hides considerable variation between individual countries, of course. The CSP's 2011 *Global Report* points out that from 1995 to 2010, state fragility ratings improved for 115—or 72 percent—of the 161 countries on its list. For 27 countries (17 percent), the ratings stayed the same, while 19 (12 percent) showed a deterioration (23). Different fragility measures provide somewhat different results. The CSP index includes OECD countries, as well as developing states. On the other hand, Carleton University's Country Indicators for Foreign Policy (CIFP) shows data for developing countries only and finds that fragility increased from 1980 to 1997 and then stopped rising and stayed at about the same level until 2006. See David Carment and Yiagadeesen (Teddy) Samy, "Extent and Sources of State Fragility and Failure: Core Factors in Fragility and Failure," PowerPoint presentation, http://www4.carleton.ca/cifp/app/serve.php/1243.pdf (accessed 4 September 2012). Over an overlapping period (1995 to 2010), the CSP dataset shows a global decline in fragility of some 20 percent.

362 Note that the implications of the descriptive statistics in the PRIO study are not exactly the same as the findings of the econometric analysis. In the former case, the PRIO graphics simply show the net trend for a range of development indicators. These graphs—like Figure 4.7 above, for example—show how development outcomes differ between countries affected by conflict and nonconflict countries. But they do *not* tell us whether conflict has an impact on these development indicators that may be overridden by other factors.