

Education Inequality and Violent Conflict: Evidence and Policy Considerations



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Equity is at the heart of the new global development agenda, with the Sustainable Development Goals (SDG) prioritizing a fair, inclusive world, where futures are not determined by one's wealth, ethnicity, sex, or other socioeconomic factors. The promise of education is to provide a pathway to greater equity, while violent conflict threatens development, with the potential to undo years of progress and investments in development.

Until now, limited evidence existed on the relationship between educational equity and violent conflict. A new study, commissioned by

UNICEF and recently completed by the FHI 360 Education Policy and Data Center, sought to change this using the largest dataset constructed to date, with data from across nearly 100 countries and over a 50 year timespan.¹

The research project explored education inequality as a determinant and an outcome of internal conflicts, given the cyclical relationship between inequality and conflict. Theoretically, one might expect that high education inequality between ethnic, religious or other identity groups supplies motivation and means for uprisings, with inequality as a source of discontent and masses mobilizing along group lines. In this framework, inequitable education systems could be a direct source of grievance or could be symptomatic of broader social or governance issues.² Once underway, violent conflict is destructive and unevenly so. It is likely to impact education for some more than others with consequences for education inequality (FHI 360 2015b; Ibid, 2016; Justino, 2016; Østby & Urdal, 2010).

1. Details for the full studies are provided in the reference section under FHI 360 (2015a) and FHI 360 (forthcoming 2016).

2. Conflict analyses completed by 14 UNICEF offices confirmed that observed inequality in distribution of education services can trigger conflict between communities. See summaries of the analyses at <http://eccnetwork.net/resources/learning-peace/conflict-analysis/>.

To investigate these relationships, FHI 360 examined inequality using the [Education Inequality and Conflict Dataset \(EIC\)](#), a new dataset developed for this research project. The EIC spans 1960–2010 and is global in scope, covering nearly 100 countries. It includes data on conflict incidence and onset from the Uppsala Conflict Data Program (UCDP)³ as well as several estimates of inequality in education, measured as disparity in average years of schooling among youth ages 15–24,⁴ extracted from household survey and census data. The study examined education inequality between culturally defined or constructed groups and socioeconomic divisions (e.g., ethnic, religious, etc.), referred to as *horizontal inequality* following Stewart (2000), as well as inequality across households or individuals, or *vertical inequality*.

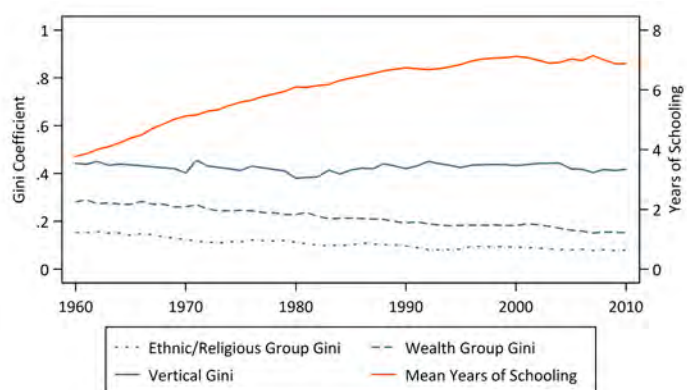
How has inequality in education changed over time?

Education attainment has risen steadily over the past five decades, as shown in *Figure 1*. Youth now attain, on average, more than six years of schooling, the equivalent of a completed primary degree in many countries, relative to 3.8 years of schooling in 1960. While overall levels of inequality today look much as they did in the 1960s, horizontal inequalities in education between ethnic or wealth groups correlate less with overall education inequality now than in the past. This indicates a more equitable distribution of education across these subpopulations today.

In all world regions, education inequality has diminished over the past half century (World Bank, 2006). Inequality is most extreme in Sub-Saharan Africa, even though the region has had the largest improvements in inequality over

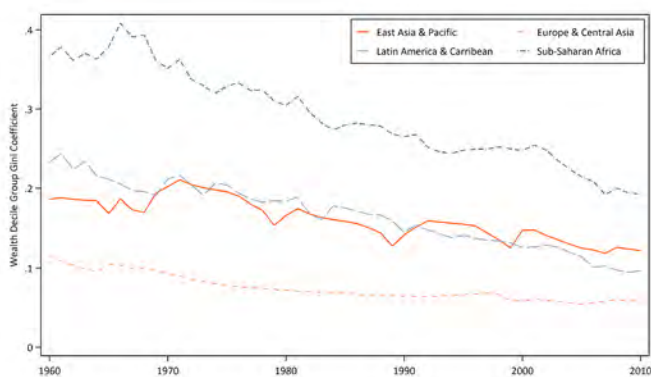
time. Although *Figure 2* focuses on education inequality between wealth groups, which typically explains more of overall inequality than inequality between ethnic or religious groups. It is important to note that countries with high inequality in one area tend to have high inequalities for other areas as well, e.g. Niger has the highest vertical Gini coefficient and also has among the highest education inequality between ethnic, wealth, and gender groups.

FIGURE 1. Educational attainment and education inequality



Note: The Gini coefficient is a measurement of inequality, with 0 representing perfect equality and 1 representing perfect inequality. In the graph above, the Gini coefficient is represented on left-hand Y-axis, while years of schooling are represented on the right-hand Y-axis.

FIGURE 2. Regional education inequality trend



3. UCDP defines armed conflict as follows: "an armed conflict is a contested incompatibility that concerns government and/or territory where the use of armed force between two parties, of which at least one is the government of a state, results in at least 25 battle-related deaths in one calendar year" (UCDP 2014).

4. Inequality is measured in years of schooling completed.

Does education inequality affect violent conflict?

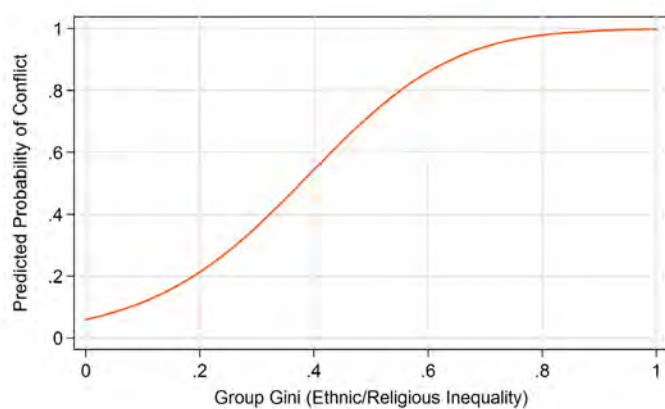
Violent conflicts are alarmingly common around the world. Since 1960, just over half of all countries have experienced at least one, 88% of which have been internal conflicts. A further half of those have been ethnic in nature.⁵

Is education inequality related to these conflicts? This global analysis found countries with greater inequalities between groups have substantially higher risk of conflict, even after controlling for other observable factors known to predict conflict, such as national wealth, political regime type, and geography.

Specifically, **the likelihood of experiencing violent conflict doubles in countries with high education inequality between ethnic and religious groups.** *Figure 3* visualizes this relationship, showing the rising probability of experiencing conflict as inequalities become more extreme.

5. Definitions and estimates of the incidences of conflict and civil conflicts are based on the Uppsala Conflict Data Program (UCDP) and the Peace Research Institute Oslo (PRIO) armed conflict database that were created by Gleditsch et al. (2002) and updated by Pettersson and Wallensteen (2015). Wimmer, Cederman, and Min (2009) identify conflicts as ethnic or non-ethnic.

FIGURE 3. Probability of conflict (%) as a function of ethnic/religious inequality post 2000

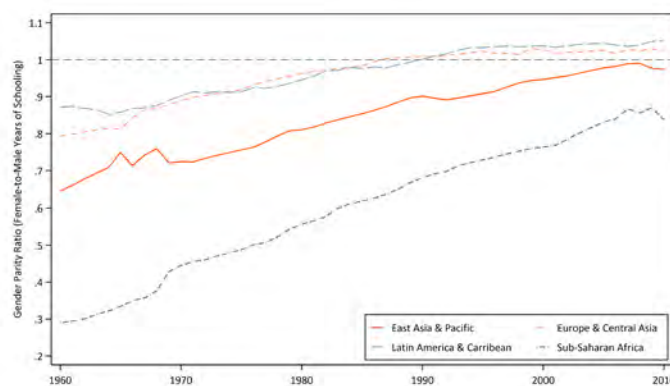


What kind of education inequality affects the risk of violent conflict?

There is a statistically significant relationship between the likelihood of conflict onset and higher education inequality — in this case, measured across subnational regions, ethnicity/religion, and gender. Educational disparities among subnational regions are consistently associated with greater likelihood of conflict across the entire time series in the dataset. In contrast, **inequalities between ethnic and religious groups were most associated with conflict in the 2000s even though they had been declining for decades.** One possible explanation for this is that as educational access becomes more widespread, educational exclusion carries more serious consequences for life prospects.

Effects are similarly stark for gender differences. **Greater equality between male and female decreases the likelihood of conflict by as much as 37%.** While gender parity for education attainment has improved markedly in most of the world, as shown in *Figure 4*, considerable differences in educational attainment between young boys and men and girls and women persist in Sub-Saharan Africa.

FIGURE 4. Regional trends in gender parity, 1960-2010⁶



6. Data were insufficient for a visual for Middle East and South Asia.

The findings of this research study provide evidence that education inequality is a predictor of conflict. Subsequently, this study finds causal evidence of conflict exacerbating education inequality more than it would have been otherwise. Further, the effects are amplified in highly fragile states. To that end, the studies create a compelling case for investment in education with a focus on equity to mitigate the likelihood of conflict. At the same time, direct conflict prevention and peacebuilding can discourage conflict, which will in turn improve education outcomes.

Does violent conflict affect education inequality? Equally important to an understanding of the inequality and conflict relationship is the impact of conflict on educational opportunity. This study finds that **conflict widens education inequalities among groups and individuals, with wealth-based groups and gender disparities particularly impacted.**

Furthermore, **the negative effects of conflict on inequality increase over time.** Figure 5 models changes in overall education inequality levels as conflicts become protracted. It demonstrates

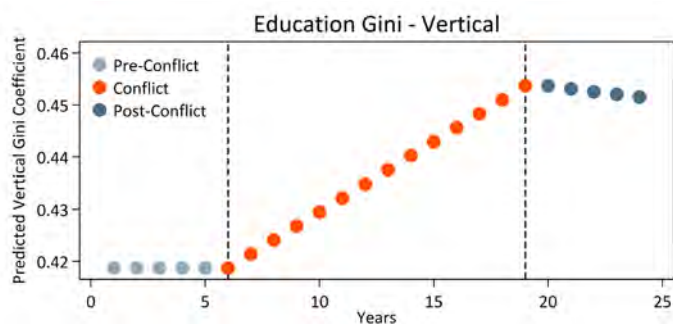
that inequality rises steadily over the course of a conflict. While the period following conflict brings improvements in inequality, there is no recovery of pre-war inequality levels in the short-term. **The longer the conflict, the harder it becomes to return to pre-conflict levels of inequality, and the more relapses to conflict there are, the gap between post-conflict inequality and pre-conflict inequality becomes larger and larger.**

Does the nature of conflict or fragility matter?

Distinguishing ethnic from non-ethnic conflicts, **the study found that ethnic conflicts are more detrimental to education inequality than non-ethnic conflicts.** Specifically, education inequality as measured by the Gini coefficient increases by 2.2 points (out of 100) as a result of ethnic conflict, whereas non-ethnic conflict has almost no effect on inequality between wealth groups. Similarly, gender parity is worsened by 5.3 points as a result of ethnic conflict as compared to being lowered by 1.7 points in the case of non-ethnic conflict.

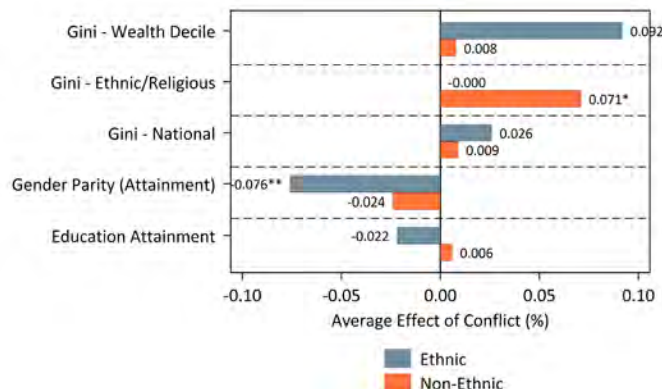
Moreover, **the effects of conflict on inequality are particularly pronounced in fragile countries**—which are defined as countries with a

FIGURE 5. Predicted vertical inequality before, during, and after conflict



Note: The X-axis represents the value of the vertical Gini coefficient as predicted by the regression model of conflict on education inequality.

FIGURE 6. Effects of conflict and fragility on inequality



* Statistically significant at $p < .10$

** Statistically significant at $p < .05$

greater risk of conflict, based on their observable characteristics (e.g., national wealth, political regime type, and geography) – possibly because factors such as weak governance and limited national resources make it harder to maintain education systems during crises. As shown in *Figure 6*, ethnic conflicts in fragile states reduce the overall stock of education and reinforce inequalities, especially wealth and gender disparities. Moreover, ethnic conflict increases the education Gini between wealth groups by 9.2 percent and lowers gender parity for education attainment by 7.6 percent. This means that the mean years of schooling for girls would have been 4.8 years instead of 4.4 years relative to 6.4 years for boys.

Policy Implications

In summary, **there is evidence that rising inequalities in education can increase the risk of conflict, and consequently, experiencing conflict can exacerbate preexisting education inequality.** This information, grounded in a series of data dating back 50 years and a global geographic span, underscores the importance of considering the equity implications of educational policy and resource allocation. Equity is not only crucial in its own right – it is a factor in social cohesion and stability. It is important to note that the most detrimental effects of educational inequality on risk of conflict were found in the latter part of the time series, post the year 2000, possibly because high levels of education inequality may not have been considered a sufficient reason for grievance when inter-group inequality was commonplace and access to education was not construed as a universal right. While more research is needed to untangle the causal linkages behind these relationships, the findings provide an impetus for greater attention to equity in education, particularly in conflict-affected and fragile settings. Investment in equitable education opportunity across ethnic,

religious, wealth, and gender groups, as well as across individuals, may be key to a country's risk of (re)lapsing into conflict. Furthermore, trends during and post-conflict suggest that, without substantial support, education inequalities are unlikely to disappear — and that continued service provision during conflict, particularly to disadvantaged groups, may be an essential element of peacebuilding in the wake of violence.

References

- FHI 360 Education Policy and Data Center. (2015a). *Does horizontal education inequality lead to violent conflict? A global analysis*. New York, NY: UNICEF PBEA.
- FHI 360 Education Policy and Data Center. (2015b). *Horizontal Education Inequality and Violent Conflict: a Literature Review*. New York, NY: UNICEF.
- FHI 360 Education Policy and Data Center. (forthcoming, 2016). *The effects of armed conflict on educational attainment and inequality*. New York, NY: UNICEF PBEA.
- Gleditsch, N. P., Wallensteen, P., Eriksson, M., Sollenberg, M., & Strand, H. (2002). Armed Conflict 1946–2001: A New Dataset [UCDP Armed Conflict data resource]. *Journal of Peace Research*, 39(5), 615–637.
- Justino, P. (2016). Supply and demand restrictions to education in conflict-affected countries: New research and future agendas. *International Journal of Educational Development*, 47, 76–85.
- Østby, G., & Urdal, H. (2010). *Education and civil conflict: A review of the quantitative, empirical literature. Background paper prepared for the Education for All Global Monitoring Report 2011*. Paris: UNESCO.
- Pettersson, T. & Wallensteen, P. (2015). Armed Conflicts, 1946–2014. *Journal of Peace Research*, 52(4), 536–550.
- Stewart, F. (2000). Crisis prevention: Tackling horizontal inequalities. *Oxford Development Studies*, 28(3), 245–262.
- Wimmer, A., Cederman, L-E., & Min, B. (2009). Ethnic politics and armed conflict: A configurational analysis of a new global data set. *American Sociological Review*, 74(2), 316–337.