



# The Dynamics of Horizontal Economic Inequality in Countries Affected by Ethnic Conflict

*Michel Armel Ndayikeza*

August 2021 / No.759

## Abstract

This paper examines the dynamics of horizontal inequality in countries that have experienced ethnic conflict. This contrasts with previous studies which have focused on the effect of inequality on conflict. Understanding how conflict affects inequality serves to shed light on reasons behind conflict recurrence and slow economic development. The complex relationship between inequality and conflict is analyzed using both quantitative information, i.e., Demographic and Health Surveys (DHS) data from 36 countries for the time 1986-2018, and qualitative information, i.e., six country case studies. The focus throughout is

on conflicts in which a rebel group claimed to fight the government on behalf of an ethnic group. The study also compares different inequality indicators suggested by the literature and provides arguments for why some of them should be preferred to others. Overall, the analysis shows that ethnic conflicts generally raise ethnic inequality. Furthermore, the way a conflict ends does not entirely determine the dynamics of horizontal inequality thereafter. The country case studies suggest that for a country to witness declining horizontal inequality following an ethnic conflict, these three conditions are important: (1) a swift victory of the rebel group; (2) financial resources to redistribute; and (3) a firm determination by the winner to redistribute. However, these conditions do not guarantee inequality decline. Therefore, the study suggests that it is important for policy makers to emphasize horizontal inequality reduction in the post-conflict period irrespective of how the conflict ended to avoid conflict recurrence.

## Introduction

Since the end of the Second World War, many countries have experienced ethnic conflicts, especially in Africa. Indeed, among 148 ethnic<sup>1</sup> conflicts<sup>2</sup> identified in this study from 1946 to 2016, 45% took place on the African continent compared to 20% in Asia, 18% in the Middle East, 13% in Eastern Europe, 3% in South America and 1% in Western Europe. In each of these conflicts, “a rebel group has made an exclusive claim to fight on behalf of an ethnic group” Vogt et al. (2015) and has engaged in a confrontation with the government, which has resulted in at least 25 battle-related deaths within a year. Today, a good number of the 148 conflicts have ended. This paper examines the effect some of them had on ethnic economic inequality with a goal of deriving germane policies for more inclusive societies.

Previous studies on the inequality-conflict nexus have focused predominantly on the effect of inequality on conflict. It has been argued that horizontal inequality, or inequality that coincides with certain groups of people, matters more in explaining conflict than vertical inequality, or inequality between individuals (Østby, 2008;

- 
- 1 I follow the definition of ethnicity used for the Ethnic Power Relations dataset by Vogt et al. (2015), which in itself follows the Weberian tradition. Ethnicity is defined as a “subjectively experienced sense of commonality based on a belief in common ancestry and shared culture”. In this sense, ethnicity includes ethnolinguistic, ethnoreligious and ethnosomatic (“racial”).
  - 2 This study deals with armed civil conflicts only. By civil conflict I mean internal armed conflict even if there may be international forces fighting in the country, which cause at least 25 battle-related deaths in a year, the threshold used by Uppsala Conflict Data Programme (UCDP) to define armed conflicts. Sometimes, war is used as a synonym for conflict to avoid repetition. This is not to be confused with the term “war” sometimes associated in the literature with a conflict that causes 1,000 or more battle-related deaths in year.

Cederman et al., 2011; Morelli and Rohner, 2015, Hillesund et al., 2018). Guariso and Rogall (2017) and Panza and Swee (2020) suggest that horizontal inequality between ethnic groups is an important driver of conflict.

Regarding the conflict-to-inequality causal chain, the first study to assess the causal link between conflict and inequality is Bircan et al. (2017). The study focuses on vertical inequality (and not horizontal inequality). Analysing a panel of 128 countries over the period 1960-2005, the authors find that income inequality rises during conflict and more so in the first five years after the conflict, and then gradually declines to pre-war levels. More recently, Dahlum et al. (2019) have analysed the effect of conflict on horizontal inequality proxied by regional inequality in infant mortality rates. The latter authors use a dataset on 120 countries for the period 1989 to 2018 and find that high-intensity conflicts are associated with higher levels of horizontal inequality in the post-conflict phase.

Several case studies which covered Guatemala, Liberia, Nepal, and other countries have focused on how horizontal inequalities have been addressed in the post-conflict contexts (Stewart et al., 2012). Some of these case studies are subject to more attention below, with the hypothesis that the nature of conflict termination determines the dynamics of inequality in the post-conflict period. For instance, a conflict between a rebel group and a government resulting in a rebel victory<sup>3</sup> should not produce the same dynamics of inequality as another similar conflict but in which the government is the winner.

Therefore, this study mainly asks the following questions. How does ethnic conflict affect horizontal inequality? How does the nature of conflict termination affect the dynamics of horizontal inequality? The effect of conflict on inequality is estimated using a regression analysis. The potential influence of conflict termination on the dynamics of inequality is analysed using six (6) country case studies.

This study is important for at least two reasons: (1) Inequality negatively affects economic development through bad institutions and low human capital investment (Easterly, 2007). If ethnic conflict increases inequality, this can partially explain why some countries which experienced such conflict in the past remain in the low-income group; (2) Since previous studies suggest that horizontal inequality causes conflict, understanding how conflict in turn affects inequality is important for post-conflict policies which seek to reduce conflict recurrence. Indeed, research has shown that approximately half of all internal armed conflicts break out again during the first twelve years of the post-conflict period (Hoeffler, 2019).

---

3 Throughout the paper, rebel victory means that the rebel group takes over the government.

In theory, one expects a conflict to influence inequality during and after conflict. During a conflict, horizontal inequality should increase if the costs of war (for example death, displacement, prevention from attending school) are borne especially by the poor. However, this is not necessarily the case. The rich may lose more than the poor if, for instance, property destruction mainly affects the wealthiest. After conflict, the dynamics of inequality could depend on the way conflict ends, whether it terminates with a peace agreement or victory of either the rebel side or the government side.

Although this study focuses on economic inequality, this is not to say that political inequality, health inequality, inequality rooted in gender and other dimensions may not matter. The study postulates, however, that access to material resources is an important steppingstone to achieving other forms of equality.

This study focuses on a list of ethnic conflicts, instead of heterogeneous conflicts, which we compiled from two sources: the ACD2EPR dataset on ethnicity by Vogt et al. (2015) and the conflict termination dataset by Kreutz (2010). The effect of these ethnic conflicts on ethnic inequality is then estimated using data from 36 countries. The data on inequality is calculated from the Demographic Health Survey (DHS) micro data. Data availability for both the inequality and conflict data has restricted the econometric part of the study to the period 1986 to 2018.

The study finds that inequality between ethnic groups rises in the period starting from conflict outbreak until ten years after conflict termination. The way a conflict ends does not say much about how inequality will evolve thereafter. However, an analysis of past ethnic conflicts suggests that the golden combination for the disadvantaged side to see an improvement of its relative economic situation following a conflict is: (1) a swift victory of the rebel group; (2) financial resources; and (3) a firm determination to redistribute. A simple victory of rebels does not necessarily secure them higher economic well-being in the aftermath of conflict, especially if the rebels are ethnically heterogeneous while peace agreements are typically accompanied with power sharing clauses which may limit quick redistributions. In the post-Cold War era, the chances of a victory are low due to a more effective international mediation. Indeed, data shows that 34% of ethnic conflicts in this last period ended in a peace agreement or ceasefire agreement, 9% in a government victory, and 5% in a rebel victory<sup>4</sup>. As these results reveal, the analysis assumes that the group which starts a rebellion is the disadvantaged one.

---

4 For the rest of the conflicts, either they have not terminated, or it is not clear how they have ended. See Section 2 for more details.

# Ethnic conflicts and how they ended: 1946-2016

Table 1 shows that close to 40% of the civil conflicts have ended in peace agreements or victory for either the government side or the rebel side, and most victories were for the government side. More than 60% of ethnic conflicts do not terminate *stricto sensu*. Close to a fifth of conflicts remained in "low activity", meaning that they stayed below the Uppsala Conflict Data Programme (UCDP)<sup>5</sup> threshold of 25 battle-related deaths per year<sup>6</sup>.

**Table 1: Conflict termination and duration (1946-2016)**

Period	Type of termination	Number	Percentage (%)	Duration (Years)
<b>1946 - 2016</b>	Peace agreement	23	19	8
	Victory for government	15	13	8
	Victory for rebels	7	6	5
	Ceasefire agreement	13	11	7
	Low activity	22	18	13
	State partition/dissolution	4	3	20
	Other	36	30	10
<b>1946 - 1989</b>	Peace agreement	5	15	
	Victory for government	7	21	
	Victory for rebels	3	9	
	Ceasefire agreement	2	6	
	Low activity	10	29	
	State partition/dissolution	0	0	
	Other	7	21	
<b>1990 - 2016</b>	Peace agreement	18	21	
	Victory for government	8	9	
	Victory for rebels	4	5	
	Ceasefire agreement	11	13	
	Low activity	12	14	
	State partition/dissolution	4	5	
	Other	29	34	

Data sources : Vogt et al. (2015) for ethnic conflicts and Kreutz (2010) for type of termination

5 <https://www.prio.org/Data/Armed-Conflict/UCDP-PRIO/>, accessed on 21st October 2019.

6 Nonetheless, these types of conflicts are not considered as ongoing. For instance, it is the case the conflict between the Uighurs and the Government of China in 2008.

Conflicts may remain in low activity because of various factors, including intra-rebel fighting, internal reorganization, and a change of combat tactics (from outright fighting to terrorism or non-fatal methods) to push for negotiations. About 11% of conflicts have ended with ceasefire agreements which do not include any resolution of the incompatibility but are rather concerned with ending the use of force. Less frequently, conflicts ended with state dissolution (dissolution of the Soviet Union in the case of Armenians) or state partition (partition of Sudan in the case of the Dinka, Shilluk and Nuer ethnic groups). For the rest of the conflicts (30%), there is no decisive outcome.

Several studies have argued that since the end of the Cold War, the international community has been more active and effective in mediation of conflicts (Mack, 2008; Kreutz, 2010; Gowan and Stedman, 2018), which should increase the number of conflicts that end in peace agreements and reduce the number of victories. Table 1 distinguishes pre- and post-Cold War terminations. Indeed, victories were the predominant type of conflict termination from 1946 to 1989 (30% of terminations). In the period after 1989<sup>7</sup>, peace agreements and ceasefire agreements became much more prevalent compared to victories. The latter period also witnessed the first partition and dissolution of countries.

On average, conflicts lasted 10 years during the period of 1946 to 2016. This seems like a long enough period for the conflicts to have a detrimental effect on livelihoods through channels discussed in the theoretical framework. In the few cases where rebels won, this usually occurred after relatively short periods of conflict. This was the case for instance in Liberia and Rwanda where rebels fought, respectively, for 1 year and 5 years before taking control of respective governments. Unsurprisingly, ethnic conflicts that have ended in state partition (case of Sudan) are the ones that have lasted the longest, on average. However, some of the longest conflicts were not considered in the calculation of duration in Table 1 because they had not terminated by 2016. The longest conflict in this last group involves the Kurds in Iran. This last conflict has been going on for more than 73 years. It is followed by the conflict between Palestinian Arabs and the government of Israel, which started in 1949.

---

7 The year of the fall of the Berlin Wall (1989) is typically considered in the literature as the final year of the Cold War period (Kreutz, 2010; Lundgren and Svensson, 2020).

# Dynamics of horizontal inequality according to type of conflict termination

The empirical analysis above is limited by data availability on types of conflict termination. More precisely, it did not look at how horizontal inequality evolves in the post-conflict phase depending on how conflict ended. This is because the dataset used for the regressions contains the following number of post-conflict years by type of conflict termination: low activity (5); peace agreement (5); government victory (1); rebel victory (1); ceasefire (1); and other (1).

Table 2 presents some ethnic conflicts for which there is careful analysis or relevant information on the dynamics of inequality. We consider conflicts which have officially ended in the sense that there has been a peace agreement, or a victory for either the government side or the rebel side. In theory, the way conflicts end should determine to some extent the dynamics of inequality in the post-conflict period. It is reasonable to think that the type of conflict termination may have an impact on how much the grieving group will benefit from government spending, particularly in education and health, and how much it will gain from available natural resources. Conflict termination could also determine whether foreign aid will flow to the grieving side or not.

**Table 2: The dynamics of inequality in the post-conflict period**

Country	Ethnicity rebels (the disadvantaged)	Conflict period	Conflict termination	Post-conflict relative economic situation of the disadvantaged
Burundi	Hutu	1965, 1991-1992, 1994-2008	Peace agreement	May have improved (Nkurunziza, 2012)
Nepal	Adibasi Janajati	1996-2006	Peace agreement	Improved moderately (Brown, 2012)
Liberia	Indigenous peoples	1980	Victory for rebel side	Worsened (Author)
Rwanda	Tutsi	1990-1994	Victory for rebel side	Significantly improved (Leander, 2012)
Cameroon	Fulani (and other northern Muslim people)	1984	Victory for government side	Slightly worsened (Author)
Tajikistan	Uzbeks	1997-1998	Victory for government side	Probably worsened (Author)

Sources: The information on conflict termination comes from Kreutz (2010). Data on conflict period and ethnicity of rebels is from Vogt et al. (2015)

## Peace agreement

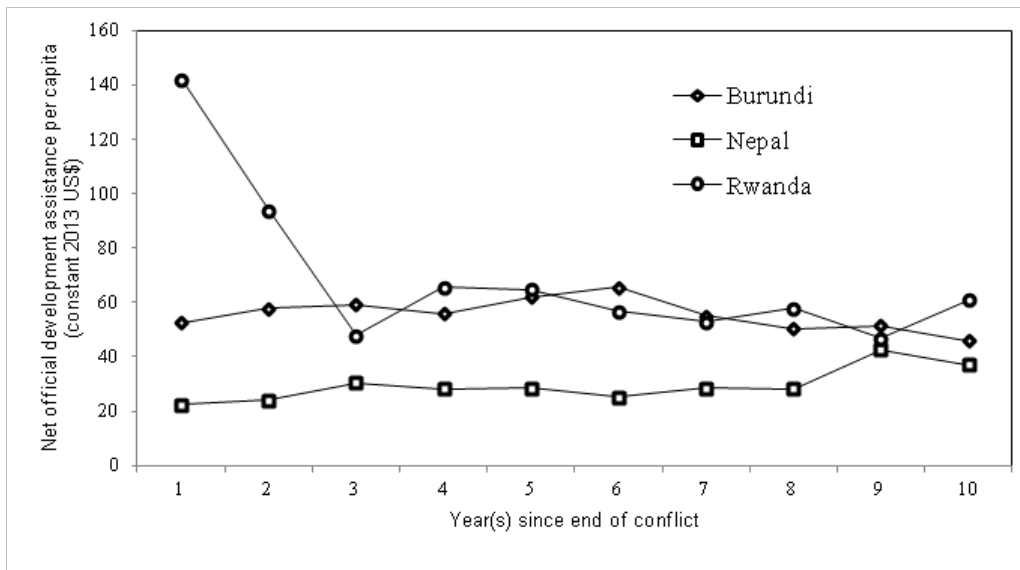
One of the main features of the peace agreement signed between the government of Burundi and rebels following the country's most severe civil war (1993-2002) was the establishment of quotas in top government positions, namely 60% for Hutus and 40% for Tutsis, and equal shares of both ethnic groups in the military and police.<sup>8</sup> Prior to this agreement, economic and political power had been concentrated in the hands of the Tutsi minority, particularly from the southern province of Bururi (Nkurunziza, 2012). Horizontal inequality had essentially grown from discrimination in access to education, which naturally limited access of Hutus to the civil service sector, military and police, the main sources of formal employment. The study conducted by Nkurunziza concludes that in the five years following the transfer of power in 2005 to the traditionally excluded group, not much had been achieved in terms of reducing ethnic inequality. The author argues that in the early post-conflict period, the country had taken important social policies aimed at expanding access to education and health to the whole population, but these measures were not sufficiently funded, and that if they should have any significant effect, it would be perceived in a longer term.

A notable difference between the experiences of Burundi and Nepal is that post-conflict aid has played an active role in redressing horizontal inequalities in the latter country (Brown, 2012). For instance, the World Bank in Nepal acknowledged the necessity to improve “fiscal transfers to disadvantaged groups” and to put in place “a civil service that better reflects the gender, caste and ethnic diversity of Nepal” (Cited in Brown, 2012). In this context, deprived groups, notably the Janajati, received relatively more aid per capita for some development programmes, involving a certain reduction of horizontal inequality. Furthermore, Figure 1 suggests that perhaps what is most important to address horizontal inequality is not the amount of aid received, but whether it effectively targets the most disadvantaged. In the first 10 years of post-conflict, Nepal received about a third of the amount of aid per capita that Burundi received.

---

8 The peace agreement, called “The Arusha Peace and Reconciliation Agreement”, was signed in 2000 and provided for a transitional period of 3 years. The Burundian civil war is usually considered to have ended in December 2002 when the main rebel group, the CNDD-FDD, signed a ceasefire agreement with the government of Burundi. The CNDD-FDD then came to power following the general election of 2005. Therefore, the year 2005 is commonly regarded as the beginning of the post-conflict period. However, the last rebel group, Palipehutu-FNL, stopped fighting in 2008 as coded in the conflict termination dataset by Kreutz (2010).



**Figure 1: Post-conflict aid per capita in Burundi, Nepal, and Rwanda**

Source: World Bank, World Development Indicators

Notes:

- 1) The first year since end of conflict is 2006 for Burundi, 2007 for Nepal and 1995 for Rwanda. The sharp decrease of aid in 1995, 1996 and 1997 in the case of Rwanda was a general trend in sub-Saharan Africa.
- 2) Net Official Development Assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25% (calculated at a rate of discount of 10%).

## Victory for rebels

The experience of Rwanda suggests that chances of a substantial improvement of the economic situation of the grieving side are maximized by a combination of winning war, having enough resources to redistribute, and being determined to pursue a redistribution agenda. After the Rwandan civil war (1990–1994), horizontal inequalities have been addressed through land reform and urbanization in favour of the previously disadvantaged Tutsis (Leander, 2012). Substantial resources permitting redistribution appeared at the turn of the millennium coming from foreign aid combined with looting of Congo's natural resources (Leander, 2012). In fact, the study by Leander suggests that the relative economic well-being of Tutsis might have increased to the point of threatening another conflict due to grievances especially related to land inequality, this time from the formerly advantaged Hutus.

The threat of conflict recurrence materialized in Liberia following the victory of rebels led by Master Sergeant Samuel Kanyon Doe. The rebels, who claimed to fight for the indigenous people, overthrew President William R. Tolbert Jr., an Americo-Liberian, on 12<sup>th</sup> April 1980 in a bloody coup in which the president was brutally murdered,

and shortly after 13 members of his cabinet publicly executed.<sup>9</sup> However, when the rebels took power, their promises to the indigenous people were not fulfilled. On top of plundering the country's wealth and taking huge loans to prop up a failing government (See examples in Sirleaf, 2010), they favoured a particular ethnic group, the Krahn, while heavily repressing other ethnic groups. This fuelled ethnic tensions even more, tensions which led to the deadliest civil war the country has known nine years after Doe's coup. The experiences of Liberia and Rwanda suggest that the victory of the disadvantaged side can create explosive grievances from the formerly dominant group. Moreover, if there are multiple ethnic groups in the country, even groups which supported the rebellion can lose out in the post-conflict period.

## Government victory

The fate of those who choose to rebel but lose the battle can be dramatic although perhaps less so in comparison with the post-conflict situation of the formerly advantaged group after a rebel victory. The cases of Cameroon and Tajikistan are illustrative. The Northern part of Cameroon, where the Fulani and other Muslims are mostly found, has been poorer than the South at least since the 1980s<sup>10</sup>. While there are multiple ethnic groups in both regions, it is generally admitted that the North is less ethnically heterogeneous than the South. Ethnic tensions heightened in February 1984 following the trial of two northerners for plotting a coup against President Paul Bia, a Southerner. In April 1984, a coup attempt officially caused 70 deaths. The failed coup was followed by a major Cabinet reshuffle and replacements of parastatal heads. Although most of these changes benefited Bia's ethnic group, the Beti, he was careful not to alienate the Northerners too much by retaining a few in top government positions and more generally by using State resources to "mollify" the North (Van de Walle, 1994).

The defeat of the Uzbeks in Tajikistan may have been more consequential. In 1997 and 1998, the forces of the Uzbek leader Khudoberdiyev rebelled against the Government of Tajikistan but lost the battle. The Uzbeks, who form the second largest ethnic group in the country (approximately 15% in 2000) after the Tajiks (almost 80% in 2000), faced political exclusion before the conflict (Fumagalli, 2007). The situation does not seem to have improved in the post-conflict period. During the period 2004-2006, there were only two (2) Uzbeks in the Tajik Parliament which counted 97 seats (CIDCM, 2006).

---

9 Only four members of Tolbert's Cabinet survived the coup and its aftermath. One of them is former president Ellen Johnson Sirleaf (2006-2018), at the time Minister of Finance (Sirleaf, 2010).

10 See, for example, (Fearon and Laitin, 2005 and the World Bank's Cameroon overview: <https://www.worldbank.org/en/country/cameroon/overview>

# Conclusion and policy implications

This paper studies the dynamics of horizontal inequality following ethnic conflicts using Demographic and Health Surveys (DHS) micro data on household wealth, ethnic conflicts data from Kreutz (2010) and Vogt et al. (2015), and several case studies. This information was analysed within a conceptual framework which allows a better understanding of the mechanisms at work. It is acknowledged that the data used in the study, and similar studies on the inequality-conflict nexus, is not ideal as detailed in the paper and therefore it is important to combine a quantitative and a qualitative analysis. Nonetheless, the available information suggests that ethnic conflicts tend to increase ethnic inequalities in the period 1986-2018, which should increase the probability of conflict recurrence. This finding is like that obtained by Bircan et al. (2017) and Dahlum et al. (2019) who also point to an inequality increasing effect of conflict. Policy-wise, it is important to pay attention to ethnic inequalities in the post-conflict period, independent of whether the conflict ended in a peace agreement, government victory or rebel victory to avoid conflict recurrence. One avenue that could enrich future work on the effect of ethnic conflict on horizontal inequality would be to explore the role of education, health, and other public services in the conflict-inequality nexus.

## References

- Bircan, Ç., T. Brück and M. Vothknecht. 2017. "Violent conflict and inequality". *Oxford Development Studies*, 45(2): 125–144.
- Brown, G., A. Langer, and F. Stewart. 2011. A typology of post-conflict environments. CRPD Working Paper, 1, 1–22.
- Brown, G. K. 2012. "Nepal: First steps towards redressing HIs?" In *Horizontal Inequalities and post-conflict Development*, pp. 275–296. Springer.
- Cederman, L.-E., N. B. Weidmann, and K. S. Gleditsch. 2011. "Horizontal inequalities and ethnonationalist civil war: A global comparison". *American Political Science Review*, 105(3): 478–495.
- Collier, P. 1999. "On the economic consequences of civil war". *Oxford Economic Papers*, 51(1): 168–183.
- Collier, P. and A. Hoeffler. 2004. "Greed and grievance in civil war". *Oxford Economic Papers*, 56(4): 563–595.
- Collier, P. and A. Hoeffler. 2007. "Civil war". *Handbook of Defense Economics*, 2: 711–739.
- Collier, P., A. Hoeffler and C. Pattillo. 2004. "Africa's exodus: Capital flight and the brain drain as portfolio decisions". *Journal of African Economies*, 13 (suppl\_2), ii15–ii54.
- Dahlum, S., H. M. Nygård, S. A. Rustad, and G. Østby. 2019. The Conflict-Inequality Trap: How Internal Armed Conflict Affects Horizontal Inequality. United Nations Development Programme.
- Davies, V. A. 2000. "Sierra Leone: Ironic tragedy". *Journal of African Economies*, 9(3): 349–369.

- Easterly, W. 2007. "Inequality does cause underdevelopment: Insights from a new instrument". *Journal of Development Economics*, 84(2): 755–776.
- Fearon, J. D. and D. D. Laitin. 2003. "Ethnicity, insurgency, and civil war". *American Political Science Review*, 97(1): 75–90.
- Fumagalli, M. 2007. "Framing ethnic minority mobilization in Central Asia: The cases of Uzbeks in Kyrgyzstan and Tajikistan". *Europe-Asia Studies*, 59(4): 567–590.
- Gowan, R., Stedman, S.J. 2018. "The international regime for treating civil war, 1988–2017". *Dædalus*, 147(1): 171–184.
- Guariso, A. and T. Rogall. 2017. Rainfall inequality, political power, and ethnic conflict in Africa. LICOS Discussion Paper Series No. 391/2017, Available at SSRN: <https://ssrn.com/abstract=2961694> or <http://dx.doi.org/10.2139/ssrn.2961694> Accessed October 25, 2020.
- Hillesund, S., K. Bahgat, G. Barrett, K. Dupuy, S. Gates, H. M. Nygard, S. A. Rustad, H. Strand, H. Urdal and G. Østby. 2018. "Horizontal inequality and armed conflict: A comprehensive literature review". *Canadian Journal of Development Studies*, 39(4): 463–480.
- Hoeffler, Anke. 2019. "Post-conflict stabilization in Africa". *Review of Development Economics*, 23, No. 3: 1238–1259.
- Humphreys, M. 2003. Economics and violent conflict. *Program on Humanitarian Policy and Conflict Research, Harvard University, February*.
- Justino, P. and P. Verwimp. 2013. "Poverty dynamics, violent conflict, and convergence in Rwanda". *Review of Income and Wealth*, 59(1): 66–90.
- Kreutz, J. 2010. "How and when armed conflicts end: Introducing the UCDP conflict termination dataset". *Journal of Peace Research*, 47(2): 243–250.
- Kuznets, S. 1955. "Economic growth and income inequality". *The American Economic Review*, 45(1): 1-28.
- Leander, S. S. 2012. "Structural violence and conflict: Vertical and horizontal inequality in post-genocide Rwanda". In *Horizontal inequalities and post-conflict development*, pp. 230–248. Springer.
- Mack, Andrew (ed). 2008. "Human security brief 2007". Vancouver: Human Security Report Project.
- Mancini, L. F. Stewart, and G. K. Brown. 2008. "Approaches to the measurement of horizontal inequalities". In *Horizontal Inequalities and Conflict*, pp. 85-105. Springer.
- CIDCM. Center for International Development and Conflict Management | University of Maryland. <https://cidcm.umd.edu/research/mar>. Accessed October 25, 2020.
- Morelli, M., and D. Rohner. 2015. "Resource concentration and civil wars". *Journal of Development Economics*, 117: 32–47.
- Ndikumana, L. 2005. "Distributional conflict, the state and peace building in Burundi". *The Roundtable*, 94 (381): 413–427.
- Nkurunziza, J. D. 2012. "Inequality and post-conflict fiscal policies in Burundi". In *Horizontal inequalities and post-conflict development*, pp. 209–229. Springer.
- Nkurunziza, J. D. 2019. "Growth in fragile states in Africa: Conflict and post-conflict capital accumulation". *Review of Development Economics* 23, no. 3 (2019): 1202–1219.
- Nunn, N. and N. Qian. 2014. "US food aid and civil conflict". *American Economic Review* 104 (6): 1630–66.

- Østby, G. 2008. "Polarization, horizontal inequalities and violent civil conflict". *Journal of Peace Research* 45 (2): 143–162.
- Panza, L. and E. Swee. 2020. "Inter-ethnic income inequality and conflict intensification in mandate Palestine." London, Centre for Economic Policy Research. [https://cepr.org/active/publications/discussion\\_papers/dp.php?dpno=14366](https://cepr.org/active/publications/discussion_papers/dp.php?dpno=14366) Accessed October 25, 2020.
- Rodrik, D. 1999. "Where did all the growth go? external shocks, social conflict, and growth collapses". *Journal of Economic Growth*, 4(4): 385–412.
- Roine, J., J. Vlachos, and D. Waldenström. 2009. "The long-run determinants of inequality: What can we learn from top income data?" *Journal of Public Economics* 93(7-8): 974-988.
- Scheidel, W. 2017. *The great leveler: Violence and the history of inequality from the Stone Age to the twenty-first century*. The Princeton Economic History of the Western World. Princeton University Press.
- Sirleaf, E. J. 2010. *This child will be great: Memoir of a remarkable life by Africa's First Woman President*. HarperCollins e-books.
- Stewart, F., R. Venugopal and A. Langer. 2012. *Horizontal inequalities and post-conflict development*. Springer.
- van de Walle, Nicholas. 1994. Neopatrimonialism and Democracy in Africa, with an Illustration from Cameroon. In *Economic Change and Political Liberalization in sub-Saharan Africa*, edited by J. A. Widner. Baltimore: Johns Hopkins.
- Vogt, M., N.-C. Bormann, S. Rüegger, L.-E. Cederman, P. Hunziker and L. Girardin 2015. "Integrating data on ethnicity, geography, and conflict: The ethnic power relations data set family". *Journal of Conflict Resolution*, 59(7): 1327–1342.



## Mission

To strengthen local capacity for conducting independent, rigorous inquiry into the problems facing the management of economies in sub-Saharan Africa.

The mission rests on two basic premises: that development is more likely to occur where there is sustained sound management of the economy, and that such management is more likely to happen where there is an active, well-informed group of locally based professional economists to conduct policy-relevant research.

[www.aercafrica.org](http://www.aercafrica.org)

## Learn More



[www.facebook.com/aercafrica](https://www.facebook.com/aercafrica)



[www.instagram.com/aercafrica\\_official/](https://www.instagram.com/aercafrica_official/)



[twitter.com/aercafrica](https://twitter.com/aercafrica)



[www.linkedin.com/school/aercafrica/](https://www.linkedin.com/school/aercafrica/)

## Contact Us

African Economic Research Consortium  
Consortium pour la Recherche Economique en Afrique  
Middle East Bank Towers,  
3rd Floor, Jakaya Kikwete Road  
Nairobi 00200, Kenya  
Tel: +254 (0) 20 273 4150  
[communications@ercafrica.org](mailto:communications@ercafrica.org)