

UNDERSTANDING CIVIL WAR: QUANTITY VERSUS QUALITY

Towards More Effective Collaboration Between the Quantitative and Qualitative Conflict Research Communities

Conference Report

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In April 2004, the Centre for Human Security at the Liu Institute for Global Issues at the University of British Columbia hosted a conference to discuss how research based on differing methodologies could be creatively combined to work towards relevant and accessible policy prescriptions. The meeting was attended by a cross-section of academics, as well as a small number of participants from NGOs, national governments, and the UN; all attended in an unofficial capacity and are not identified here. This report summarizes the memorandums they prepared for the conference and the comments they made in the discussions that ensued.

Some discussions were concerned with the divisions within the research community caused by different methodologies and distinct literatures, particularly those favouring quantitative analysis versus those favouring qualitative analysis.

Discussions also explored the difficulty of translating research findings into policy. For example, low gross domestic product (GDP) per capita strongly correlates with conflict, but demonstrating that association does not reveal how to prioritize development spending. In another example, the finding that large diasporas are associated with civil war has led some to propose draconian restrictions on refugees, going far beyond the improved regulation of financial markets that the researchers argued for (Collier et al., 2003, pp. 183-184).

Participants concluded that researchers need to present a more sophisticated portrait of civil conflict, one that takes into account if, how, or when specific statistical correlates translate into war. Presenting such a portrait might help to limit the distribution of vague and misleading research findings, which can in turn lead to counterproductive policy recommendations.

Topics Summarized in This Report

During the conference, participants discussed seven topics related to both civil conflict research and security policy:

1. development
2. political and economic inequalities

3. neighbourhood effects
4. international security after conflict
5. natural resources
6. transitional justice after civil war
7. war and health

In considering each topic, the participants reviewed the findings (if any) of statistical studies, discussed differing interpretations of and technical caveats to the findings, and proposed directions for further research. Participants also debated how policy recommendations might be reinforced, altered, or reversed by a program of research that takes full advantage of both quantitative and qualitative studies of civil war.

1. Development

Statistical Findings

Findings from many statistical studies suggest that nations with higher incomes are less prone to civil conflict, as are societies experiencing rapid economic growth (Collier & Hoeffler, 2001; Elbadawi & Sambanis, 2002; Fearon & Laitin, 2003; Hegre et al., 2001). By comparison, findings from studies of variables such as democracy, ethnic and social divisions, or natural resource dependence have been less consistently robust. But problems of interpretation and methodology underlie even the apparently clear link between poverty and internal violence.

Differing Interpretations

The association between low national income and conflict has been explained in divergent ways. Collier and Hoeffler (2001) have argued that higher national income and income growth are important because they represent *opportunity costs*—the economic opportunities that citizens, generally young men, forgo when they join an insurgency. They argue that pro-growth macroeconomic policy is therefore the best way to eradicate civil war. They have buttressed their interpretation with the finding that low education levels among young men are also correlated to civil war, but this result has been less widely replicated. And in most conflicts it is not the very poorest members of society—by logic those with the lowest opportunity costs of all—who take up arms or who make very effective soldiers.

Fearon and Laitin (2003), by contrast, suggest *state capacity* should be the focus—that poor nations are prone to internal conflict because they have limited state institutional capacities. They suggest that civil war is best curtailed through investment in counterinsurgency and reforming dysfunctional states. The interpretation suffers from data limitations, however, as national income is at best a proxy of state capacity. More ideal would be measures of the state's extractive capacity, infrastructure,



provision of public goods, repressive capacities, and its social legitimacy. But this information is generally scarce or difficult to quantify.

These two interpretations—opportunity costs versus state strength—are heavily cited, but they are neither exhaustive nor sufficiently detailed. People in poor economies face a unique set of circumstances and constraints. National income is a very strong statistical proxy for an array of social conditions such as education, population structure, health outcomes, and gender relations.¹ Consider a few alternative mechanisms by which poverty and conflict may be related:

- Poverty is a grievance, as are economic shocks that cause new or unusually severe deprivation.
- Rich societies may be less conflict prone because they have more resources to divide up and can thus pacify groups suffering discrimination or poverty.
- Wealthy firms and people are able to move their assets abroad more easily than the poor are. Resisting a predatory regime is thus more difficult in an underdeveloped society.
- Economic downturns may force migration in poorer societies, causing competing claims for land or overwhelming the ability of cities to provide services and employment.

When discussing how poverty causes civil war it is also important to remember that politics provides an intervening variable. Statistical regression may be used to control for the impact of democracy on internal conflict, but it is more difficult to quantify economic mismanagement, kleptocracy, and inefficient diversion of state resources for political ends. Poverty and state incapacity or illegitimacy may be more complementary than competitive as mechanisms of conflict. For example, in Burundi the economy has suffered from decades of government economic interventions—including control of trade and foreign exchange and allotment of foreign aid—in favour of the Tutsi elite and their home region (Nkurunziza & Ngaruko, 2004). Tutsi political control and discrimination against the Hutu majority are also at the heart of the civil war. It seems nearly impossible to disentangle either poverty or violence from their foundations in the power dynamics of Burundi itself.

As intuitive as all these interpretations may seem, the demonstrated correlation of poverty with conflict is not an unproblematic statistical result. Both investors and households may anticipate instability before a war and start removing their capital from a country. The depression in economic variables preceding most conflicts would thus be unsurprising. This is a possibility that statistics can be used to investigate, at least in part. Miguel,

¹ Collier and Hoeffler (2001) cannot simultaneously use GDP per capita and literacy to predict civil war; the terms are so closely related that they cancel each other. The State Failure Task Force finds high infant mortality is correlated with conflict onset (Esty et al., 1998a and 1998b). Melander (2004) has predicted civil conflict using female-to-male education ratios.



Satyanath, and Sergenti (in press) have found that rainfall shortages cause income drops in sub-Saharan Africa. Because rainfall does not anticipate civil conflict, drought is an independent observation of economic adversity, and the authors find that such shocks are followed by greater risk of conflict. They argue that governments can manage climate shocks through interventions such as public works programs.

New Directions for Research and Policy

Policymakers clearly need a rich description of the economic and institutional weaknesses that make a society conflict prone. This would permit setting priorities for countries and interventions, and provide greater knowledge of whether the trade-offs associated with certain interventions, such as liberalization or privatization, are dangerously destabilizing. For example, Miguel, Satyanath, and Sergenti (in press) propose that underdevelopment and dependence on agriculture are underlying conditions, that rainfall shortage is an exogenous shock, and that political management can either trigger or prevent conflict. This is a causal chain that can be put to the test. Droughts tend not only to recur but to occur regionally, and so past events and neighbouring countries could be examined to see if differing policies are associated with differing risks of conflict. This avenue of research might provide a sufficient number of cases for statistical analysis using interaction terms (e.g., comparing open and closed economies after rainfall shocks), while case studies would then be able to describe policy interventions more precisely.

A second avenue of research involves analyzing micro-level survey data to discover how firms and households cope with low-income economies, especially politically. Researchers might ask whether kinship networks are more important than the state for obtaining services or the degree to which formal institutions are subsumed in traditional relationships, both possible signs of state weakness (Migdal, 1988). Surveys in conflict settings could aim to gather more information on the experiences of people in war—leaders, government forces, insurgents, and civilians—to clarify motivations and strategies. UN-managed programs of combatant demobilization, for example, already conduct surveys that social scientists could use to glean information.²

Finally, spatial analysis could improve our knowledge of civil war and development. Geographic information system (GIS) mapping tools have become increasingly easy to use and provide a way to look at the setting of a conflict in far more detail. A variety of GIS data, including locations of war violence, already exists, and other data, such as survey results, can be

² The methodological challenges of survey research are, of course, pertinent. After a war, questions can only be posed to survivors. Memories fade, respondents lie, and opinions and motives change through indoctrination or self-justification. However, survey research routinely confronts similar problems in other settings and has developed methods for circumventing them. Findings that are confirmed across a pool of different times and places could be especially useful.

differentiated spatially and compared with this GIS data. For example, our knowledge of the link between unemployment and willingness to revolt in certain regions might be furthered by studying crop yields to see whether rebels tend to be recruited more easily from areas of poor agricultural performance.

2. Political and Economic Inequalities

Statistical Findings

When it comes to addressing the relationship between conflict and how much wealth a society has and how resources are controlled and distributed, theorists have posed every possible relationship from positive to negative as well as more erratic patterns across the spectrum of inequality. But cross-country statistical research (Collier & Hoeffler, 2001; Hegre, Gissinger & Gleditsch, 2003) has not demonstrated any strong relationships between Gini coefficients or other measures of income inequality and civil war.

Differing Interpretations

Conclusions based on this non-finding should be considered preliminary at best. If the relationship between conflict and inequality is not fairly simple (closely modeled by a line or parabola), or if it varies according to some important third factor such as access to education or political power, basic statistical tests will miss it. Also, inequality data are often limited and unreliable, especially for regions of interest. Finally, studies of income inequality consider *vertical* inequality, ranking individual households from top to bottom. But Stewart (2002) has argued that it is more important to study the *horizontal* inequality in a society, or inequality between cultural groups. She suggests that what is important is not that some are poor and some are rich, but that these positions are ascriptive. Rigid social structures enhance the frustrations of the underprivileged and cultural distance feeds the fears of the privileged.

Some statistical studies have found a positive relationship between horizontal inequality and conflict risk (Gurr, 1993; Østby, 2003). As with studies of vertical inequality, difficulties of measurement are serious. Reliable data on economic status by cultural categories are even rarer than good inequality data. The data are also politically sensitive, and raise ethical questions as to whether collecting and/or releasing these figures could create or exacerbate social tensions. And, finally, a researcher must determine which groups' resource endowments should be compared. People move between groups, and membership in any one group may only become salient at certain times. Researchers generally observe which identities seem politically important and then collect data. But the fact that

these divides are already contentious makes it unsurprising that they relate to future conflict. Rather than proving something about diversity or inequality per se, such findings may demonstrate that leaders can find convenient schisms in most populations.

An objective measure of the status of groups also fails to capture the full psychology of inequality and group resentments. Possibly, it is more important to consider the following dynamics:

- changing economic or demographic relationships caused by differential growth rates
- attribution of blame; for example, the 1998 wage arrears crisis in Russia seems to have had little impact on politics because most voters perceived the responsibility to be widely shared (Javeline, 2003)
- daily interactions that can generate virulent hatred through regular humiliation in some cases and lead to gradual assimilation in others
- the role of political entrepreneurs and the underlying factors that permit culturally exclusive ideologies to succeed

New Directions for Research and Policy

Moving from objective measures of income inequality to an understanding of group psychology is not an easy task for macro-level statistics. One approach might involve constructing a model predicting inequality that could then be compared with observed levels in specific cases. This would generate a measure of *disappointed expectations*. Measures of total inequality could also be decomposed according to horizontal versus vertical spread simultaneously. And indicators other than income might also be useful. For example, in Northern Ireland access to education has been equalized but access to the police and army remains exclusive. This creates tensions that are not revealed in a study of income distribution.

As well as improving statistical work, researchers might pursue other avenues. Survey instruments could be used to study attitudes about inequality. Small-n study could be valuable since there is often more comparable data available across a single country or region. For example, comparing Human Development Indicators collected across provinces in Indonesia reveals that the richest provinces are the ones that have attempted to secede (Tadjoeddin, 2003), while comparing similar data collected in Nepal reveals that the most intense battle violence during the Maoist rebellion has been in the poorest regions (Murshed & Gates, 2003). Such findings are a useful reminder that both rich and poor can have reasons to challenge the distribution of resources.

Further study of inter-group tensions is extremely important because the policy choices surrounding inequality are so confusing.³ Statistical models

³ Of course, policymakers may not be interested in addressing these inequalities, depending on how group dynamics translate into political power. For example, when the elites are a very narrow group they have little incentive to avoid conflicts that seldom affect them directly. Likewise, many rulers may

seem to suggest that mobilization around ethnicity, religion, and inequality is not predetermined but opportunistic. Would such a finding, if true, be a reason for concern because there is a latent potential for unrest in *any* diverse society? Or would this finding be a reason for optimism because it means that ancient hatreds may not be so immutable after all? It is also unclear whether there is more benefit in addressing horizontal inequalities and risking majority resistance than there is in encouraging broad growth and thus co-opting minority elites. Understanding the influence of the global economic context is also important. Are high levels of national development (the basic goal of most structural adjustment programs) the best protection from violence, or should attention to the poorest members of society or balancing the interests of different groups take precedence? For example, liberal trade policy shifts incomes in favour of the more skilled part of the population, and thus whatever groups they come from.

3. Neighbourhood Effects

Statistical Findings

A civil war often has an international element. Major states or regional powers may support or fight on behalf of governments and insurgents or may even engineer the war.⁴ Some insurgent movements have an ideological commitment to "conflict diffusion", as in the case of Che Guevara's communism or militant international Islamism. But such intentional contagion does not seem to be the only route by which neighbourhoods influence civil war. Macro-level studies have found that countries bordering a civil war have an increased risk of experiencing internal conflict and that hosting a large refugee population from a neighbouring state has a clear relationship to conflict incidence (Esty et al., 1998a; Esty et al., 1998b; Gleditsch, 2003). Conflicts thus tend to be clustered spatially: in 2002, 11 of 15 internal conflicts had clear spillovers, and 3 of the remaining cases took place on islands (Seybolt, 2002).

Differing Interpretations

Explanations for this diffusion remain contested. One potential mechanism is *negative economic influences*. There may be a decline in trade and investment because of diminished economic activity in the state at war and because investors have fled the region (Murdoch & Sandler, 2002). Economic growth may also be hampered by distortion of regional markets, damage to populations and infrastructure during combat, and increased outlays on defence (Collier et al., 2003). Living beside a war economy can lead to an upsurge of weapons and contraband trafficking, banditry, and violence.

hold power only as long as they continue to use resources to feed certain groups rather than to address broader social needs (Adam & O'Connell, 1999; Humphreys & Bates, 2002).

⁴ Meddling can also come full circle, as when Charles Taylor's sponsorship of the Revolutionary United Front (RUF) in Sierra Leone eventually restarted war in Liberia.



A second proposed mechanism of diffusion is *demonstration effects*. Rebellion next door may make citizens anxious to rectify their own grievances. Ethnic grievances may be particularly likely to spread through communication within kin groups (Marshall, 1999). Tactical efficiency can go far beyond bordering states by way of demonstration effects, with the mimicry of the Tamil Tigers' suicide bombings being a well-known example (Pape, 2003). Governments as well as rebels learn from their neighbours, and may practise preventive repressions that backfire.

Third, it has been suggested that transborder population movements can spread violence (for a review of these issues see Stedman & Tanner, 2003). Demonstration effects may accelerate through direct contact, especially if alliances form between insurgent groups. The use of transborder regions as havens for insurgency can lead to a direct spillover of fighting as well.

New Directions for Research and Policy

Studying conflict neighbourhoods does not necessarily call for statistical models to yield predictions, at least for policy purposes. Regional experts and conflict monitoring can point out the incidence and mechanism of diffusion in particular cases. The more important policy need is to know what kind of strategies, both regional and national, are actually effective in curtailing regional violence. Policymakers realize that transnational insurgency, weapons trafficking, and smuggling call for regional solutions (International Peace Academy, 2003), but what the exact solutions might be remains vague at best. It is rare that the international community is willing to defend a border on behalf of a beleaguered state.⁵ And post-colonial borders were often drawn in the most remote and poorly demarcated areas. Developing societies need cheap and effective strategies for countering violence and criminal activity along these borders, and ways to cooperate in doing so. In the Andes, for example, the war on drugs has been compared to combating a balloon of illicit economic activity and violence—when squeezed flat in one country, it simply swells in others.

The problem of porous borders may also lead scholars to raise questions about concepts of sovereignty. International recognition and effective control of territory do not always go together, as the contrast between Somaliland and Somalia demonstrates. Also, the potential for spillover in civil war seriously weakens the logic behind tying aid programs to benchmarks of government effectiveness, since this can mean that donors are content to leave some states to become black holes of corruption and poverty. Working only with the "good performers" makes little sense if those states are eventually sucked into their neighbours' wars, as in the case of West Africa, where conflict seems to have finally reached Côte d'Ivoire.

⁵ A unique case was the preventive deployment of troops to the Macedonian border in December of 1992 to discourage a transborder Serbian insurgency.

Regional conflict management is a topic that lends itself to comparative case study. For example, Burundi had five episodes of civil war before one spilled over in 1993, suggesting a possible time series comparison. In 1993, refugees and rebels moved into Rwanda, Zaire, and Tanzania. Only Tanzania avoided its own civil conflict, suggesting a cross-sectional comparison might be useful. Regional security is also a problem that calls for bringing geographical tools into conflict studies. For example, if mapping tools reveal that the borders associated with conflict tend to be in thinly populated areas and difficult terrain, this would suggest these sites might be important as rebel havens rather than centres of ideological indoctrination.

4. International Security after Conflict

Statistical Findings

Foreign intervention during war (whether in the form of direct military intervention, military aid, economic aid, or sanctions) generally makes wars last longer; the most protracted conflicts are those in which both sides are receiving outside support (Regan, 2000).⁶ Of course, historically most interventions have been designed to help one side win. But in the post-Cold War context, international actors who maintain official neutrality have increasingly tried to use mediation, sanctions, and diplomatic pressures to bring about negotiated peace agreements. There is much to borrow from the interstate war literature, but there is still a need to analyze the spectrum of international interventions—from economic coercion to security guarantees and programs of post-conflict reconstruction—in terms of how they can influence civil conflict.

Differing Interpretations

To date, much of the statistical literature has focused on international security guarantees for peace agreements, such as those provided by UN peacekeeping missions. In such cases, third parties monitor and verify agreements, and deploy troops to ensure the safety of both sides. Such missions address the problem of mutual mistrust and the possibility that even if all groups are actually committed to peace, they are unable to believe this of each other. Statistical research demonstrates these interventions can have an impact (Walter, 2002), while differing on details and interpretations. Doyle and Sambanis (2000) find that only UN peacekeeping missions that include economic and institutional as well as security components seem to have been effective in preventing a return to war, and that these were most effective when backed by robust troop presence and mandates for use of force. Conversely, Fortna (2002) finds

⁶ International relations theorists have explained this by noting that outside assistance can lower the costs of continued conflict, enhance the sides' organizational capacity, making defeat more difficult, give the parties financial incentives to pursue war, and lead to commitment problems.

that UN Chapter VI peacekeeping missions have been more effective than Chapter VII missions. This is puzzling, given that Chapter VII missions have all the power of Chapter VI missions, but with a greater latitude for using force. Fortna suggests that accidents may lead to re-ignition of conflicts in such cases, a hypothesis that could be readily investigated with a qualitative review of all Chapter VII missions that failed to promote peace.

New Directions for Research and Policy

As statistical findings, all of these results suffer from selection bias. If leaders who already intend to be peaceful bring in peacekeepers, the peacekeepers are more likely to be effective. To look at this possibility, statisticians need to consider UN budgets or the global stock of troops available for peacekeeping, asking if conflicts that end when resources are particularly tight are also more likely to return to war.

However, case analysis suggests that the effectiveness of outside intervention varies according to local dynamics. Relatively well-trained and motivated combatants, as in the Balkans, may greet force with force, while loose quasi-bandit groups may not resist even minimal troops presence. For example, Stedman (1997) has distinguished between intervention strategies in a typology based on the kind of potential "spoilers" the international community must confront. He discusses not just troop presence but positive incentives and socialization as tools for post-conflict peace building, and argues that the likely success of these methods differs by context.

Consideration of the multiple facets of peace building is valuable at a time when the list of internationally designed post-conflict goals has burgeoned far beyond the capacities of most post-conflict states, and at a time when the use of such positive incentives is becoming increasingly unlikely with a new emphasis on post-conflict justice. Identifying appropriate priorities for each setting is needed for better policy, as is finding creative strategies for simultaneously rebuilding and providing sufficient levels of public goods. For example, reconstruction plans often pay lip service to empowering actors assumed to have strong incentives to back the peace, such as women and supporters of civil society. But we do not really understand how and if outsiders can mobilize these groups to change combatants' constraints and incentives. More often the only results are quotas and benchmarks set up to mark the nominal participation of these groups in various events. Post-conflict elections, a standard part of the UN tool kit, have also not received much critical attention, despite the fact that political science has an enormous literature on elections and voting dynamics.



5. Natural Resources

Statistical Findings

Collier and Hoeffler (2001) brought the issue of natural resources and civil war into the policy spotlight with a statistical study arguing that the ratio of primary commodity exports to GDP displayed a curvilinear statistical relationship to conflict. They suggested that diversion of primary commodities was providing a means of jump-starting rebellion. In the quantitative research community, these results have been widely challenged (Ross, 2004b). The measures used have been criticized for imprecision: they include exports of agricultural products and other high-bulk, low-value commodities, and thus may reflect underdevelopment rather than available rebel loot. Collier and Hoeffler's findings have also not been replicated in most other models and they disappear in the researchers' own work if the observations are transformed from five-year averages to annual figures (Fearon, 2004).

Differing Interpretations

Scholars from across the discipline have also taken umbrage at Collier and Hoeffler's interpretation of their findings. Very diverse dynamics emerge in case studies of natural resources and wealth (Ross, 2004a):

- The end of the Cold War has removed the most ready source of military aid for both rebels and governments. Today's rebellions may be self-financing out of necessity rather than any particular decline of ideology.
- War seldom, if ever, begins as an economic enterprise. Even warlords squirreling away gains from smuggling are ultimately focused on wielding power.
- Resource wealth may lead to local grievances or cause governments to practise harsh pre-emptive repression in resource-rich areas.
- Resource-rich regimes tend towards corruption and have little incentive to build the state's capacity to levy taxes and deliver public goods, or to encourage the growth of other economic sectors (Bates & Lien, 1985; Reno, 1995). The presence of resources may actually weaken states rather than present rebels with opportunity.
- Resource-dependent economies tend to be organized around enclaves of economic activity rather than dense networks for moving goods and services. The lack of a trading economy means that conflict poses fewer costs and peace promises fewer rewards.
- Primary commodity dependence may be associated with structural adjustment or other attempts to move towards export-orientation. Such economic transitions are politically and socially disruptive, and may be the real source of conflict.

Collier and Hoeffler's work, by contrast, has helped to highlight stakeholder analysis of armed conflict. Conflict entrepreneurship means that, in some

cases and for some actors, war is actually more attractive than peace (King, 2001). The policy implications of this fact can be quite important. International actors profiting from the war may have little interest in peace negotiations. Natural resources that can be gathered by individuals also create incentives for the sides to splinter, complicating negotiations. On the positive side, the presence of natural resources (if they are legal goods) may also provide a readily available incentive to lure parties to the negotiating table.

New Directions for Research and Policy

To fully understand the relationship between natural resources and war there is a need for more information on who controls resources and how the relative military strength of the parties changes as a result. Studies of the political economy of the combatant groups require data on how financing is being generated and channelled within these organizations. The incentives for war or peace depend on the conflict's economic benefits and risks for elites, the selectorate or electorate that empowers them, the neighbours, and the international community. Thus, we require information about economic activity and linkages well beyond the sector of natural resources.

Despite the existence of research gaps, policy initiatives have already come out of a stakeholder analysis of conflict. The best-known is the Kimberley Process for certifying the source of diamonds. Since the process was implemented in 2002 there has been a major jump in the volume of legally exported gemstones coming from countries such as Sierra Leone and the Democratic Republic of the Congo. Many features of the diamond trade make it ideal for both conflict financing *and* for application of international monitoring. Conflict diamonds are generally gathered from alluvial fields using unsophisticated equipment and unskilled labor. Diamonds have a very high ratio of value to weight and are traded on a market that has long been largely unregulated and highly corrupt. . These are all advantages for smugglers. At the same time, international monitoring has been effective because diamonds have little intrinsic value and the demand for them is entirely foreign. Scholars might do more to describe the unique properties of various commodities markets, the likely importance of these markets in conflict, and the regulations or market incentives that could disrupt such an effect.

6. Transitional Justice after Civil War

A Separate Literature

Some kind of official process that addresses human rights abuses has become a standard part of international post-conflict plans. These plans increasingly include tribunals, either ad hoc or international, that are



empowered to try, and punish wrongdoers.⁷ International jurisdiction has also been extended to national courts, making offers of exile less meaningful. These trends have raised some concerns that reconciliation and justice are not necessarily compatible goals, and that the threat of post-conflict justice will lead to more abuses and prolonged conflicts as leaders cling to power. The topic of transitional justice itself remains somewhat outside the civil war literature, having attracted interest more often from advocates, policy analysts, and scholars of international law and human rights.

Historically, most processes of transitional justice have been internal, self-imposed exercises following regime change towards democracy. The three components in most of these cases have been trials of wrongdoers, purges of the administration and/or public associations, and restitution. Goals have varied, and have included:

- offering redress to victims
- offsetting the lack of a full judicial process
- preventing private retribution
- deterring future authoritarians
- incapacitating the recently deposed
- reincorporating wrongdoers into society

Societies have also differed in their assessments of the underlying psychological needs that the process should serve. Some processes have been based on the presumed necessity to squarely face even the most gruesome facts, while others have avoided doing so on the grounds that facing facts would only be divisive and traumatic to victims.

Truth and Reconciliation

How does transitional justice differ when it follows a civil war rather than a regime change, and when it is not internally designed but imposed in an internationally mediated negotiation? Snyder and Vinjamuri (2003), examining 32 civil wars from 1989 to 2003, draw the conclusion that continued peace depends more on politics than justice. They criticize the declining use of amnesties, for example, arguing that leaders without the prospect of amnesty will be more likely to cling to power and extend wars in future. They find truth and reconciliation commissions to have been effective only when they are implemented by a pro-democracy coalition in an institutionalized state. In other settings, these commissions exacerbate tensions or provide a smokescreen for abuses. In response, Gibson (2004) argues that this interpretation too readily minimizes the real psychological impact of forms of justice other than punishment or financial retribution. These can include public apology, an opportunity for the victim to tell his or

⁷ See Hayner (2002) for a more thorough review and assessment of 32 truth and reconciliation commissions.

her story, and a formal recognition of full citizenship. Using survey data from South Africa, he finds that individuals who accept the findings of the Truth and Reconciliation Commission (TRC) are also more likely to display attitudes of reconciliation to multi-ethnic democracy and the non-apartheid state.

New Directions for Research and Policy

It is important to know if successful post-conflict processes of justice and reconciliation can be reproduced, or if cases like South Africa are simply fortunate outliers. Processes of justice may be endogenous, an outward sign of a commitment to social transformation already determined. A researcher might, for example, investigate this question by asking if amnesties occur only when leaders have strong control over their organizations and face little risk of challenge based on calls for retribution.

The ingredients of a successful process deserve study. For example, the South African TRC's standing was enhanced by the support of figures with tremendous moral credibility, such as Desmond Tutu and Nelson Mandela, who called for forgiveness and tolerance by all sides. In other countries, internationally designed truth and reconciliation commissions must often draw on figures who do not inspire the same kind of public affection and have no special legitimacy or even a particularly high profile. It is not clear how much legitimacy stems from the process itself and how much from the charisma of those involved.

Finally, the possibility of trade-offs between reconciliation and justice is an area worthy of scholars' attention. Examining cases where the threat of post-conflict justice has either deterred leaders or caused them to cling to power would be useful, since both responses are possible. Impacts beyond elites are also important and should be studied. Transitional justice may interfere with demilitarization if soldiers avoid demobilization programs because they erroneously believe that special courts will be prosecuting them as well as their leaders. Also, a number of recent civil wars, including those in Rwanda and Sierra Leone, have ended with simultaneous trials for the worst offenders and truth-telling processes for the society at large. Survey data could reveal the extent to which the two tracks complement or undermine each other's influence on public attitudes.

7. War and Health

Macro-level and Micro-level Quantitative Work

During war, "indirect" deaths caused primarily by disease and malnutrition generally far outstrip those caused by violence. Of ten countries with the highest mortality rates among children under age five, seven have experienced recent civil conflict (Black, Morris & Bryce, 2003). Political scientists have demonstrated the long-term public health consequences of

conflict (Ghobarah, Huth & Russett, 2003), adding to an extensive literature by epidemiologists and demographers that documents these dynamics broadly. For example, studies from the Democratic Republic of the Congo have demonstrated that areas with the worst battle violence also had the most severely elevated crude mortality rates, and that the ratio between violent and non-violent deaths during the war may have been as dramatic as one to six (Roberts et al., 2003). The grim interplay between conflict and health arises despite the fact that most causes of war-related death, such as diarrhea, measles, and malaria, can be easily treated if emergency aid workers can reach the population. In international law, meanwhile, there is little provision for assigning accountability for these tragedies.⁸

The Question of Mechanism

The impact of war on health is clear, but it also operates through so many channels that it can be difficult for policymakers to prioritize interventions. During a war, health has an enormous strategic and propaganda potential:

- Denial of medicine and food can be a weapon.
- Stealing international aid can be a mode of finance.
- Statistics and images may be manipulated to deter or invite international intervention.
- Government and rebels may, in wars with a territorial component and disciplined forces, compete to gain legitimacy by demonstrating an ability to administer health care, social services, and aid.

Complex public health challenges continue in a post-war society. Resources and infrastructure have been destroyed, and the economy is in decline. Money that would have been allocated to health may now be diverted to economic reconstruction, government reform, or the military. Ongoing insecurity may block efforts to rebuild or prevent the displaced from returning home. Donor aid is often inefficiently organized or inappropriate for the circumstances, as when there is targeting for a politically "hot" disease.

At the same time, individuals and households face their own set of constraints, the most obvious being a loss of income. After a war, unemployment levels increase. Members of the family may be missing or killed, and livestock, tools, and other capital destroyed. Displaced persons are far from their land or usual means of livelihood. Gaining physical access to health care may also be more difficult because the nearest medical facilities are at a distance and there is no transport infrastructure. Emergency aid is not always free of charge, and as the conflict recedes in time international relief becomes increasingly scarce.

⁸ There have been calls for the U.S. military to re-evaluate its concept of "proportionality"—the civilian collateral damage that can be accepted given a particular military goal—to include an explicit accounting of indirect civilian deaths (Daponte, 2003). The bombing of dual-use utilities is one example of a military strategy criticized on these grounds.

New Directions for Research and Policy

With so many mechanisms in play, scholarship has a real contribution to make by improving our capacity to predict what will be needed in different conflict settings. The in-war manipulation of health by governments and rebels is an issue that can be studied by comparing specific cases and by applying the literature on strategic interactions and game theory. There should also be a more systematic assessment of the strategies outsiders have adopted towards health during various wars, and consideration of how and if they changed the dynamics of the conflict or met humanitarian goals.

To look at health both in and after war, researchers would also gain from knowing more about individual household experiences. Fortunately, information for weighing the importance of the mechanisms outlined above may already be available because micro-level quantitative health data is frequently gathered to identify gaps and design interventions for specific societies. A study of Nepal, for example, has revealed that maternal health outcomes have fallen most in rural areas where health workers have had to flee their posts, while a similar survey of Sri Lanka finds that security has been less of a problem than inadequate medical supplies (Chaudbury & Zanabm, 2003). In Columbia, by contrast, health care capacity has remained strong and even been improved throughout the war, but infant mortality remains persistently bad among households where the father has been killed (Urdinola, 2003). Scholars could mine this wealth of data in order to formulate hypotheses regarding how health will be affected when certain types of conflict occur in different societies.

Conclusion

Statistics show that there has been a decline in civil war worldwide since the early 1990s (Mack, in press). Yet if the international system seems at present more conducive to civil peace than in Cold War decades, that is no reason for complacency; rather, this should be seen as an opportunity to address the domestic factors that lead to internal violence. The stresses on nations in the developing world are severe and in many cases transitions from authoritarianism have left the world with more unconsolidated regimes than at any other time in history. Governance reforms, economic liberalization, and international security regimes are being imposed by external actors. Global development remains uneven, and even countries that have seen strong economic growth are now dealing with new problems of inequality. The public health challenge of HIV/AIDS is immense in much of the world. Given this set of global trends, policymakers need to know how to prevent and manage conflict in nations at various stages of political and economic development.

Scholars can help address these needs by developing knowledge of civil conflict that goes beyond an understanding of the typical or average experience. Macro-level statistical study will continue to be important, but a



broader range of research tools can and should be used to investigate conflict and, especially, the policy interventions that can establish and deepen civil peace.



References

Adam, C.S., & O'Connell, S. (1999). Aid, taxation, and development in sub-Saharan Africa. *Economics and Politics* 11(3), 225-254.

Bates, R., & Lien, D.H.D. (1985). A note on taxation, development, and representative government. *Politics and Society* 14(1), 53-70.

Black, R., Morris, S., & Bryce, J. (2003). Where and why are 10 million children dying every year? *Lancet* 361, 2226-2234.

Chaudbury, R.H., & Zanabm, W. (2003). *Impact of conflicts on health including reproductive health in Nepal and Sri Lanka: Report of the UNFPA Country Support Team for South and West Asia*. Paper presented at the IUSSP Seminar on the Demography of Conflict and Violence. Oslo, Norway, 8–11 November.

Collier, P., Elliott, L., Hegre, H., Hoeffler, A., Reynal-Querol, M., & Sambanis, N. (2003). *Breaking the conflict trap: Civil war and development policy*. Oxford: Oxford University Press.

Collier, P., & Hoeffler, A. (2001). *Greed and grievance in civil war*. Policy Research Working Paper 2355. Washington, DC: World Bank.

Daponte, B. O., (2003). *Why Estimate Direct and Indirect Casualties from War? The Rule of Proportionality and Casualty Estimates*. Paper presented at IUSSP Seminar of the Demography of Conflict and Violence, Thorbjørnrud, 8–11 November.

Doyle, M., & Sambanis, N. (2000). International peacebuilding: A theoretical and quantitative analysis. *American Political Science Review* 94(4), 779-801.

Elbadawi, I.A., & Sambanis, N. (2002). How much war will we see? Explaining the prevalence of civil war. *Journal of Conflict Resolution* 46(3), 307-334.

Esty, D.C., Goldstone, J., Gurr, T.R., Surko, P.T., Unger, A.N., & Chen, R.S. (1998a). The state failure project: Early warning research for U.S. foreign policy planning. In J.L. Davies & T.R. Gurr (Eds.), *Preventive measures: Building risk assessment and crisis early warning systems*. Lanham, MD: Rowman and Littlefield.

Esty, D.C., Goldstone, J., Gurr, T.R., Surko, P.T., Unger, A.N., & Chen, R.S. (1998b). The state failure report: Phase II findings. *Environmental change and security project report 5*.

Fearon, J.D. (2004). *Primary commodity exports and civil war*. Manuscript submitted for publication. Retrieved 10 August 2004 from McGill Research

Group in Conflict and Human Rights Web site:
<http://www.mcgill.ca/rqchr/jcrpapers/>.

Fearon, J.D., & Laitin, D.D. (2003). Ethnicity, insurgency, and civil war. *American Political Science Review* 97(1): 75-90.

Fine, J., Garfield, R. and Leaning, J. (2002). 'Conflict Monitoring', in: Ilkka Taipale et al. (Ed.). *War or Health? A Reader*. London: Zed.

Fortna, V.P. (2002). 'Inside and Out: Peacekeeping and the Duration of Peace after Civil and Interstate Wars.' *International Studies Review* 5 (4): 97-114.

Ghobarah, H.A., Huth, P.K., & Russett, B. (2003). Civil wars kill and maim people—Long after the shooting stops. *American Political Science Review* 97(2), 189-202.

Gibson, J.L., (2004). *Overcoming Apartheid: Can Truth Reconcile a Divided Nation?* New York: Russell Sage Foundation.

Gleditsch, K.S. (2003). *Transnational dimensions of civil war*. Unpublished manuscript. Retrieved 10 August 2004 from Department of Political Science, University of California at San Diego Web site:
<http://weber.ucsd.edu/~kgledits/papers/transnational.pdf>.

Gurr, T.R. (1993). *Minorities at risk. A global view of ethnopolitical conflicts*. Washington, DC: U.S. Institute of Peace Press.

Hayner, P.B., (2002). *Unspeakable Truths: Facing the Challenge of Truth Commissions*. New York, NY: Routledge.

Hegre, H., Ellingsen, T., Gleditsch, N.P., & Gates, S. (2001). Towards a democratic civil peace? *American Political Science Review* 95(1), 33-48.

Hegre, H., Gissinger, R., & Gleditsch, N.P. (2003). Globalization and internal conflict. In G. Schneider, K. Barbieri, & N.P. Gleditsch (Eds.), *Globalization and Armed Conflict*. Oxford: Rowman and Littlefield.

Humphreys, M., & Bates, R. (2002). *Political Institutions and Economic Policies: Lessons from Africa. CID Working Paper, no. 94*. Center for International Development, Harvard University. (Available at <http://www.cid.harvard.edu/cidwp/pdf/094.pdf>)

International Peace Academy. (2003). *The regionalization of conflict and intervention*. IPA Seminar Report. New York, NY: International Peace Academy.

Javeline, D. (2003). The role of blame in collective action: Evidence from Russia. *American Political Science Review* 97(1), 107-121.





King, C. (2001). The benefits of ethnic war: Understanding Eurasia's unrecognized states. *World Politics* 53(4), 524-552.

Krug, E.G., Dahlberg, L.L., Mercy, J.A., Zwi, A.B., & Lozano, R. (2002). *World report on violence and health*. Geneva: World Health Organization.

Mack, A. (Ed.). (in press). *Human Security Report*. New York: Oxford University Press.

Marshall, M.G. (1999). *Third world war: System, process, and conflict dynamics*. Boulder, CO: Rowman and Littlefield.

Melander, E., (2004). *Gender Equality, Wealth, and the Onset of Intrastate Armed Conflict*. Paper presented at ECPR Joint Session of Workshops, Uppsala, Sweden, 14-18 April.

Migdal, J.S. (1988). *Strong societies and weak states: State-society relations and state capabilities in the third world*. Princeton, NJ: Princeton University Press.

Miguel, E., Satyanath, S., & Sergenti, E. (in press). Economic shocks and civil conflict: An instrumental variables approach. *Journal of Political Economy*.

Murdoch, J.C., & Sandler, T. (2002). Economic growth, civil wars, and spatial spillovers. *Journal of Conflict Resolution* 46(1), 91-110.

Murray, C. J. L., King, G., Lopez, A. D., Tomijima, N. and Etienne G. Krug, E.G. (2002). 'Armed Conflict as a Public Health Problem', *British Medical Journal* 324(7333), 346-9.

Murshed, S.M., & Gates, S. (2003). *Spatial-horizontal inequality and the Maoist insurgency in Nepal*. Paper presented at a conference sponsored by the Human Security Centre at the Liu Institute for Global Issues of the University of British Columbia—Mapping and Explaining Civil War: What to Do About Contested Datasets and Findings? Oslo, Norway, 18-19 August.

Nkurunziza, D., & Ngaruko, F. (2004). *Economic growth in Burundi from 1960 to 2000*. Paper presented at a conference sponsored by the Centre for Human Security at the Liu Institute for Global Issues of the University of British Columbia—Understanding Civil War: Quantity versus Quality? Bellagio, Italy, 5-7 April.

Østby, G. (2003). *Horizontal inequality and civil war: Do ethnic group inequalities influence the risk of domestic armed conflict?* Unpublished master's thesis. Department of Political Science, Norwegian University of Science and Technology, Trondheim, Norway.



Pape, R.A. (2003). The strategic logic of suicide terrorism. *American Political Science Review* 97(3), 1-19.

Regan, P. (2000). *Civil wars and foreign powers: Outside intervention in intrastate conflict*. Ann Arbor, MI: University of Michigan Press.

Reno, W. (1995). *Corruption and state politics*. Cambridge: Cambridge University Press.

Roberts, L., Ngoy, P., Mone, C., Lubula, C., Mwezse, L., Zantop, M., et al. (2003). *Mortality in the Democratic Republic of Congo: Results from a nationwide survey*. Bukavu/New York: International Rescue Committee. Retrieved 10 August from International Rescue Committee Web site: http://intranet.theirc.org/docs/drc_mortality_iii_full.pdf.

Ross, M. (2004a). How do natural resources influence civil war? Evidence from thirteen cases. *International Organization* 58(1), 35-68.

Ross, M. (2004b). What do we know about natural resources and civil war? *Journal of Peace Research* 41(3), 337-356.

Seybolt, T.B. (2002). Major armed conflicts. In *SIPRI Yearbook 2002: World armaments and disarmament* (pp. 21–96). Oxford: Oxford University Press.

Snyder, J., & Vinjamuri, L. (2003). Trials and errors: Principle and pragmatism in strategies of international justice. *International Security* 28(3), 5-44.

Stedman, S.J. (1997). Spoiler problems in peace processes. *International Security* 22(2), 5-53.

Stedman, S.J., & Tanner, R. (Eds.). (2003). *Refugee manipulation: War, politics, and the abuse of human suffering*. Washington, DC: Brookings Institution.

Stewart, F. (2002). *Horizontal inequalities: A neglected dimension of development*. QEH Working Paper Series No. 81. Oxford: Queen Elizabeth House, University of Oxford.

Tadjoeddin, M.Z. (2003). *Aspiration to inequality: Regional disparity and centre-regional conflicts in Indonesia*. Paper presented at the UNU/WIDER Project Conference on Spatial Inequality in Asia. Tokyo, Japan, 28-29 March.

Urdinola, B.P. (2003). *Does violence affect infant mortality? The Columbian case*. Paper presented at the IUSSP Seminar on the Demography of Conflict and Violence. Oslo, Norway, 8-11 November.



Walter, B. (2002). *Committing to peace: The successful settlement of civil wars*. Princeton, NJ: Princeton University Press.