

Social Protection and Risk Management

Civil War, Crime, and Violence

Violence is a key reason for the broadening chasm between developed and developing countries. The social systems created by war give rise to greater poverty and inequality, which in turn increase crime and violence. In the 1990s, violence created approximately 13 million refugees and 38 million internally displaced persons world-wide. Moreover, these enormous social costs have been born disproportionately by the developing world.

This research project set out to identify the causes of violence in war and crime. There had been little work done using econometrics and modern statistical approaches to study civil war, crime, and violence.

The project primarily used cross-country analysis to identify trends and features of conflict that are common across developing countries. The project commissioned case studies and regional analyses. Data are rare on these topics because those countries where crime and conflict are more likely to occur also have the least capacity for data collection and maintenance. Still, one of the major contributions of this research project is the data that were collected and compiled. The findings showed that in countries where the cost of rebellion was low, civil war was most likely. Countries that could provide sustained economic growth were able to increase the opportunity cost of conflict and work out of the “conflict trap” through development. The findings also showed that reliance on commodity exports, particularly oil, and diasporas were significantly related to conflict. Economic equality and growth tended to reduce violent crime and the risk of conflict, while income inequality and slow economic growth significantly increased the rates of violent crime.

The project highlighted the importance of economic policies in fighting crime and avoiding conflict. The research on crime did not undercut the importance of effective law enforcement in fighting crime; however, it emphasized the key role of social and economic factors.

Findings from the project have directly informed the formation, organization, and mission statements of operational units in the World Bank, such as the Conflict Prevention and Reconstruction Unit and the Low-Income Countries Under Stress Initiative (LICUS). In addition, this research has led to the development of a new research project on Drug Trafficking and Development, which is under preparation, and further research on Post-Conflict Transitions.

In addition to the publications listed below, the project produced a large set of research papers, which have been presented at conferences and workshops, published in academic journals, and posted on the project’s Web site. In addition to the continued update of the project’s Web site, there is a project newsletter. For papers and datasets, see <http://econ.worldbank.org/programs/conflict>. Several of the papers were collected in a special issue of the *Journal of Peace Research* (May 2004; see <http://jpr.sagepub.com/content/vol41/issue3/>).

Responsibility: Development Research Group, Investment Climate Team—Ibrahim Elbadawi (Ielbadawi@worldbank.org), Paul Collier, Norman Loayza, and Phil Keefer. With Nicholas Sambins, Yale University; Anke Hoeffler, Center for the Study of African Economics; Havard Hegre, International Peace Research Institute of Oslo; Michael Doyle, Columbia University; Edward L. Glaeser, Harvard University; Gary Milante, World Bank; Marta Reynal-Querol, Univeritat Pompeu Fabra; and Siyan Chen, World Bank.

Project Code: P058654.

Completion date: June 2007.

Publication

Collier, Paul, and Nicholas Sambanis, eds. 2005. *Understanding Civil War* (Volumes 1 and 2). Washington, D.C.: World Bank.

The Economics and Politics of Post-Conflict Transitions – Follow-up

After civil conflict, fragile states often find themselves at great risk of civil war recurrence, extreme criminal violence, and rampant political corruption. However, post-conflict periods also provide excellent opportunities for political reform and effective aid through post-conflict reconstruction. This project focused on the most vulnerable states – those emerging from a civil war—and considered how the structure of risk in those states differs from the risk of civil war in states that have not experienced a civil war previously. The project focused specifically on the relationship between political institutions – democratic institutions in particular—and the risk of new violence.

The project produced three papers. The research on partitioning used a panel of post-conflict countries, including both those that had been partitioned and those that were not partitioned, and treated partitioning as a treatment effect in hazard analysis to determine whether partitioning contributed to

a lasting peace. The findings showed that partitions are not likely to contribute to a more lasting peace.

The research on post-conflict democratization used a large sample and panel data of countries across time with a multinomial logit model to identify the likelihood of political change (toward democracy/away from democracy/no change) in post-conflict countries. The analysis found little relationship between conflict and democratic progress.

Because data on crime and violence were difficult to come by, the research on post-conflict violence used data collected from three countries – El Salvador, Guatemala, and Lebanon – and compared crime data following civil war in the three countries. The research argued that post-conflict criminal violence in Guatemala and El Salvador was attributed to economic policies that weakened the state's coercive and distributive capacities, which in turn diminished the opportunity costs of crime. Lebanon's economic policies and contingencies differed sharply from the other two cases under investigation, which may explain its low crime rates. This research also demonstrated that criminal violence constitutes a serious threat to development. In El Salvador and Guatemala, the costs of criminal violence have already exceeded those of their respective civil wars.

All three papers were recently presented at a conference in Khartoum, hosted by the Ministry of Finance and the National Economy of Sudan (MFNE), the University of Khartoum Economics and Political Science Department, the World Bank Institute, and the DEC Research Support Budget on Management of Post-Conflict Transition: The Challenges of Institutional Reform in Sudan.

Responsibility: Development Research Group, Investment and Growth Team—Ibrahim Elbadawi and Gary Milante. With Havard Hegre, International Peace Research Institute of Oslo (PRIO); Nicholas Sambanis, Yale University; Nazih Richani, Kean University.

Project Code: P093994.

Completion date: June 2007.

Publications

Elbadawi, Ibrahim, Havard Hegre, and Gary Milante. "Post-Transition Democratization and Democratic Stability."

Richani, Nazih. "Systems of Violence in Post-Conflict Societies."

Sambanis, Nicholas. "Partition and Civil War Recurrence."

Post-Conflict Transitions

An overwhelming 40 percent of post-conflict states slide back into conflict within ten years. This research project suggests that to help countries escape this conflict trap, the develop-

ment community needs to adjust assistance policies based on the latest research, as well as country-specific analysis. The goal of the project was to inform the international community and developing countries recovering from conflict on effective policies for avoiding conflict relapse and escaping the conflict trap.

The research followed on the successful research of the Economics of Civil War, Crime, and Violence project. As such it was related to the previous project; however, it extended the research by specifically focusing on the aftermath of conflict and effective policy to help countries out of the conflict trap. This project benefited from new data sources and methodologies, and a widely expanded literature due in no small part to the success of the previous research project.

The project used cross-country panel data to identify common features and trends in post-conflict development. In addition, many of the project studies employed hazard models and other innovative time/risk econometric approaches for predicting the likelihood of conflict relapse.

The project findings showed that the risk of civil war is sensitive to the opportunity cost of peace, the means of potential rebels to strike at the resources of their government, and the coordination of groups with grievances. The findings also showed that regional factors and past experience contribute significantly to the likelihood of future civil conflict. That is, vulnerability to civil wars is persistent and often dependent on neighbor fragility. Furthermore, outside interventions can mitigate the risk of civil war. Ongoing research confirms the initial findings that countries benefit from external intervention and suggests how that intervention should be structured.

The project produced 27 papers, and presentations at two workshops and a dissemination conference. Details on the conferences can be found at the permanent URL for the project: <http://go.worldbank.org/84GRAQ0KY0>. Sixteen of the papers have been published in the World Bank's Policy Research Working Paper series under the special project flag "Post-Conflict Transitions." They are WPS 4185, 4186, 4187, 4190, 4191, 4192, 4193, 4194, 4196, 4202, 4207, 4208, 4210, 4221, 4242, and 4243. Additional papers will be added to this series. Other current versions of the papers are available on the interactive agenda from the most recent conference, available at the project Web site: <http://econ.worldbank.org/programs/conflict>. Several of the papers will be published in special issues/symposia of the *Journal of Peace Research* and *The World Bank Economic Review*, with expected publication in 2008.

Responsibility: Development Research Group, Investment Climate Team—Ibrahim Elbadawi (Ielbadawi@worldbank).

org), Philip Keefer, and Norman Loayza. With Paul Collier and Anke Hoeffler, Center for the Study of African Economics; Havard Hegre, Nils Peter Gleditsch, Scott Gates, Indra de Soysa, and Gudrun Ostby, International Peace Research Institute of Oslo; Gary Milante, World Bank; Marta Reynal-Querol, Universitat Pompeu Fabra (Spain); Nicholas Sambanis, Yale University; and Ana Maria Cristina Bodea, World Bank.

Project Code: P094690.

Completion date: September 2007.

Publications

Bundervoet, Tom, Philip Verwimp, and Richard Akresh. 2007. "Short-term and Long-term Effects of United Nations Peace Operations." Post-Conflict Transitions Working Paper PC 12; Policy Research Working Paper 4208. World Bank, Washington, D.C.

Davies, Victor A.B. 2007. "Capital Flight and War." Post-Conflict Transitions Working Paper PC 13; Policy Research Working Paper 4210. World Bank, Washington, D.C.

Gates, Scott, Helga Malmin Binningsbo, and Tove Grete Lie. 2007. "Ethnic Polarization and the Duration of Civil Wars." Post-Conflict Transitions Working Paper PC 6; Policy Research Working Paper 4192. World Bank, Washington, D.C.

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Hegre, Havard, Lene Siljeholm Christiansen, and Nils Petter Gleditsch. 2007. "Democratic Jihad? Military Intervention and Democracy." Post-Conflict Transitions Working Paper PC 15; Policy Research Working Paper 4242. World Bank, Washington, D.C.

Jennings, Colin. 2007. "Political Leadership, Conflict, and the Prospects for Constitutional Peace." Post-Conflict Transitions Working Paper PC 9; Policy Research Working Paper 4196. World Bank, Washington, D.C.

Keefer, Philip. 2007. "Insurgency and Credible Commitment in Autocracies and Democracies." Post-Conflict Transitions Working Paper PC 1; Policy Research Working Paper 4185. World Bank, Washington, D.C.

Killicoat, Phillip. 2007. "Weaponomics: The Global Market for Assault Rifles." Post-Conflict Transitions Working Paper PC 10; Policy Research Working Paper 4202. World Bank, Washington, D.C.

Milante, Gary. 2007. "A Kleptocrat's Survival Guide: Autocratic Longevity in the Face of Civil Conflict." Post-Conflict Transitions Working Paper PC 2; Policy Research Working Paper 4186. World Bank, Washington, D.C.

Neumayer, Eric, and Indra de Soysa. 2007. "Disarming Fears of

Diversity: Ethnic Heterogeneity and State Militarization, 1988-2002." Post-Conflict Transitions Working Paper PC 14; Policy Research Working Paper 4221. World Bank, Washington, D.C.

Ostby, Gudrun. 2007. "Horizontal Inequalities, Political Environment, and Civil Conflict: Evidence from 55 Developing Countries, 1986-2003." Post-Conflict Transitions Working Paper PC 7; Policy Research Working Paper 4193. World Bank, Washington, D.C.

Oyefusi, Aderoju. 2007. "Oil and the Propensity to Armed Struggle in the Niger Delta Region of Nigeria." Post-Conflict Transitions Working Paper PC 8; Policy Research Working Paper 4194. World Bank, Washington, D.C.

Raleigh, Clionadh, and Havard Hegre. 2007. "Population Size, Concentration, and Civil War: A Geographically Disaggregated Analysis." Post-Conflict Transitions Working Paper PC 16; Policy Research Working Paper 4246. World Bank, Washington, D.C.

Reynal-Querol, Marta, Norman V. Loayza, and Siyan Chen. 2007. "The Aftermath of Civil War." Post-Conflict Transitions Working Paper PC 4; Policy Research Working Paper 4190. World Bank, Washington, D.C.

Sambanis, Nicholas. 2007. "Short-term and Long-term Effects of United Nations Peace Operations." Post-Conflict Transitions Working Paper PC 11; Policy Research Working Paper 4207. World Bank, Washington, D.C.

Schmidt-Hebbel, Klaus, Linda Kaltani, and Ibrahim A. Elbadawi. 2007. "Post-conflict Aid, Real Exchange Rate Adjustment, and Catch-up Growth." Post-Conflict Transitions Working Paper PC 3; Policy Research Working Paper 4187. World Bank, Washington, D.C.

Local Conflicts and Development Projects

This project studied how different (often competing) rules systems—from local customary and religious rules to state law and project requirements—are negotiated in poor communities. The study looked specifically at whether and how the poor seek to resolve everyday disputes. The project is operating in four countries: Indonesia, Cambodia, Sierra Leone, and Cambodia

Most research on this issue has centered on understanding and bringing about institutional change at the macro or aggregate level. By contrast, this project sought to understand institutions and institutional change from the bottom up, by investigating how different types of local institutions and actors jointly negotiate problem-solving activities in poor communities.

The project explicitly adopted a mixed methods ap-

proach, using quantitative material, where available, to help with sample selection and to assess aggregate changes (for example, in perceptions or in conflict incidence). It conducted in-depth, qualitative research, which entailed extensively training and working with local researchers.

Four key findings emerged from the study. First, development projects of all kinds generate and facilitate much conflict, which can become violent. Second, the Kecamatan Development Program has generated fewer violent local conflicts than comparable development projects, largely because of the efficacy of its facilitators and complaint mechanisms. Third, in selected instances (most notably where local institutions are weak), the Kecamatan Development Program appears to have generated positive spillovers on those non-project conflicts where the key issue is violation of procedural rules (for example, elections of local leaders). And fourth, conflicts of all kinds are most likely to escalate where there is a highly pluralistic legal environment and no clear mechanism for mediation.

The policy implications are that development projects of all kinds—not just those using competitive bidding mechanisms to allocate resources—need to be far more attentive than they characteristically are to the potentially violent conflicts they are likely to generate.

Project findings have been presented at seminars at the following: Harvard, Yale, the Center for Global Development, the World Bank (in Washington and Jakarta), George Mason University, John Hopkins School of Advanced International Studies (Washington, D.C.), Massachusetts Institute of Technology, Oxford University, Princeton University, Universitas Indonesia, the Southeast Asia Conflict Studies Network (Malaysia), and the MOST-LIPI/UNESCO conference on Conflict in the Asia-Pacific Region (Jakarta).

Responsibility: Development Research Group, Poverty Team—Michael Woolcock (mwoolcock@worldbank.org); and Caroline Sage (LEGJR), Scott Guggenheim (EASES), Mathew Stephens (EASSO), and Daniel Adler (LEGJR). With Ryann Manning and Tanja Chopra.

Project Code: P053756.

Completion date: August 2007.

Publications

Barron, Patrick, Rachael Diprose, and Michael Woolcock. 2007.

“Local Conflict and Development Projects in Indonesia: Part of the Problem or Part of a Solution?” Policy Research Working Paper 3713. World Bank, Washington, D.C.

———. Forthcoming. *Contesting Development: Participatory Projects and Local Conflict Trajectories in Indonesia*. Yale University Press.

Bebbington, Anthony, Scott Guggenheim, Elizabeth Olson, and Michael Woolcock, eds. 2006. *The Search for Empowerment: Social Capital as Idea and Practice at the World Bank*. Bloomfield, CT: Kumarian Press.

Dudwick, Nora, Kathleen Keuhnast, Veronica Nyhan Jones, and Michael Woolcock. 2006. “Analyzing Social Capital in Context: A Guide to Using Qualitative Methods and Data.” World Bank Institute Working Paper 37260. World Bank, Washington, D.C.

Gibson, Christopher, and Michael Woolcock. Forthcoming. “Empowerment, Deliberative Development and Local Level Politics in Indonesia: Participatory Projects as a Source of Countervailing Power.” *Studies in Comparative International Development*.

Sage, Caroline, and Michael Woolcock, eds. 2006. Law, Equity, and Development. Special volume of the World Bank Law Review. Amsterdam: Martinus Nijhoff, and Washington, D.C.: World Bank.

———. Forthcoming. “Breaking Legal Inequality Traps: New Approaches to Building Justice Systems for the Poor in Developing Countries.” In Anis Dani and Arjan de Han, eds., *Inclusive States: Social Policy and Structural Inequalities*. New York: Palgrave Macmillan.

Crises, Polarization, and Reform

This research project investigated the role of development and democracy in determining the likelihood of genocide and other gross human rights violations. The objective of the analysis was to establish what have been historically the main risk factors for the occurrence of genocide and other gross human rights violations.

This was one of the few analyses to apply rigorous economic analysis to investigate the occurrence of mass killings. Moreover, by assembling a new publicly available database, the project provided a useful tool for other researchers and policy-makers to investigate and understand these phenomena.

The project assembled a new data set from historical sources spanning 1820 to 1998, containing information on the occurrence and magnitude of episodes of mass killing. Using cross-country regression analysis, the project studied the relationship between mass killings and levels of development and democracy across countries and over time.

The project findings showed that mass killings are more likely at intermediate levels of income and less likely at very high levels of democracy. However, the project did not find evidence of a linear relationship between levels of democracy and the probability of mass killings in the full sample.

In the twentieth century, discrete improvements in democracy were systematically associated with episodes involving fewer victims.

This research fed directly into the ongoing policy dialogue in the World Bank and outside on civil war and violence. By identifying countries with less than perfect democracy scores as countries at the highest risk of gross human rights violations, the research underscored that democracy – an essential precondition – should be supplemented by human rights protection and other guarantees of individual rights to bring about beneficial outcomes for all.

Project findings were presented at the Annual Political Science Association meetings, Chicago.

Responsibility: Development Research Group, Macroeconomics and Growth Team— Bill Easterly (William.easterly@nyu.edu), Roberta Gatti, and Sergio Kurlat.

Project Code: P049866.

Completion date: June 2007.

Publication

Easterly, William, Roberta Gatti, and Sergio Kurlat. 2006. "Development, Democracy, and Mass Killings." *Journal of Economic Growth* 11(2): 129-56.

STAR: Study of Tsunami Aftermath and Reconstruction

This research project is assessing the socio-economic, physical, and psychological well-being of more than 30,000 adult and child survivors of the December 2004 Sumatran tsunami using survey data representative of the pre-tsunami population.

The project is examining the impact of the tsunami on the socio-economic behavior and physical and mental health of the Indonesian population living along the coast of Aceh and North Sumatra. It is also recording the effects of the reconstruction experience at the household level and identifying the relative effectiveness of differing reconstruction policies.

No previous study has taken pre-disaster representative population data and re-contacted surviving households to create a panel. In this regard, STAR is a truly innovative study.

The analytical approaches are varied, depending on the particular research question at hand. All involve the analysis of observational panel data. Data sources are principally those collected by the project (at the household, facility, and community level) supplemented with satellite images of the study area.

The project findings are numerous. For example, tsunami-caused mortality of children was much higher for children living separately from their mother (although in households

with other adults). Post-traumatic stress disorder was widespread immediately following the tsunami but subsided quickly. Public services of neighboring communities unaffected by the tsunami were significantly strained by the shift of local resources to affected areas.

Project findings have been presented at the Population Association of America Annual Meeting (2006, 2007); World Bank Public Service Conference (2006); World Bank Health, Nutrition, and Population Seminar (2006); and American Economic Association Annual Meeting (2007).

Responsibility: Development Research Group, Poverty Team—Jed Friedman (jfriedman@worldbank.org). With SurveyMETER, Yogyakarta, Indonesia.

Project Code: P098855.

Completion date: December 2010.

Publications

Friedman, Jed. Forthcoming. "Assessing Health and Education Services in the Aftermath of a Disaster." World Bank, Washington, D.C.

_____. "Mental Health in Sumatra after the Tsunami." Forthcoming. *American Journal of Public Health*.

Security and Development

In 2004, the World Bank decided to invest resources to examine the state of knowledge regarding the interaction of security and development, and specifically terrorism and development on the one hand, and drug trafficking and development on the other. The World Bank sponsored papers from leading scholars in each of these areas to contribute to a volume on each of the two topics. The volume on terrorism and development is forthcoming; that on security and development is nearly complete.

Contributors to the volume on terrorism and development examine the economic and fiscal costs of terrorism and the response to terrorism. They conclude that the economic costs of terrorism in rich countries are low relative to the economic costs of combating terrorism; both are likely high in poor countries. They also report evidence on how development affects terrorism. This work supports the hypothesis that political development—political openness and the quality of government—is inversely associated with the emergence of terrorist organizations, but not that poverty per se is directly responsible for terrorism.

Contributors to the volume on drug trafficking and development shed new light on the costs to poor countries of the war on drugs. They conclude that the efficacy of the war on drugs, in terms of stemming cultivation and trafficking of nar-

cotics, is scant, but that the costs imposed on target countries are high, both directly (in terms of farmer incomes) and indirectly (in terms of institutional degradation).

It is expected that the policy impact of this work will be two-fold. First, it will shift counter-terrorism assistance toward development, and particularly political development. Second, it will shift public policy in rich, drug-consuming countries to other approaches to the war on drugs that do not impose on poor countries costs that are vastly disproportionate to the benefits (if any) that they offer to rich countries.

Responsibility: Development Research Group, Growth and Investment Team—Philip Keefer (pkeefer@worldbank.org) and Norman Loayza (nloayza@worldbank.org). With Todd Sandler, University of Dallas; Walter Enders, University of Alabama; Gregory Treverton, Rand Corporation; Gregory Hess, Claremont; S. Brock Blomberg, Claremont; Alan Krueger, Princeton; David Laitin, Stanford; Jacob Shapiro, Stanford; Nicholas Sambanis, Yale; Fernanda Llusá, Universidade Nova de Lisboa; José Tavares, Universidade Nova de Lisboa; William Byrd, World Bank; Francisco Thoumi, University of Bogota; Peter Reuter, University of Maryland; Rodrigo Soares, University of Maryland; Romulo Chumacero, Universidad de Chile; Daniel Mejía, Universidad de los Andes, Colombia; and Julia Buxton, Georgetown University.

Project Code: P094727.

Completion date: September 2008.

Publication

Keefer, Philip, and Norman Loayza, eds. Forthcoming. *Terrorism, Economic Development and Political Openness*. Cambridge: Cambridge University Press.