

Econ 970: The Economic Analysis of Conflict

Spring 2011

Instructor: Andrew Coe, acoe@fas.harvard.edu

Meetings: MW 1–2:30pm in Memorial Hall 029 and MW 4–5:30pm in CGIS Knafel N108

Quantitative Level: 3

Description

Will the United States go to war to stop Iran from developing nuclear weapons? Why did the US fight a war with Iraq over its possession of weapons of mass destruction, when in fact it had none? How expensive was the Iraq war, and what were the alternatives? Would North Korea be willing to sell a nuclear weapon, as it has threatened to do? Who would its likely customers be?

What kind of person becomes a terrorist, and why? Why are religious terrorist organizations more effective and destructive than others? Where do terrorists come from, and how do they choose their attacks? What is the best way to defend against terrorist attacks?

Policymakers in the US and other countries struggle with these specific questions every day. As social scientists, we can also ask deeper questions about conflict itself. Why do nations, groups, and individuals sometimes resolve their differences violently? Is war fundamental to human nature? Is it always irrational? Why are some states mostly peaceful, and others prone to fighting? Why do some suffer recurring civil war, while others are more stable?

In the last fifteen years, social scientists have begun to employ the tools of economics to study these questions. There are now game-theoretic models that offer explanations for the origins, conduct, and termination of wars, and the historical record of conflicts has been compiled into large datasets and subjected to statistical analysis. The scientific study of conflict is still in its infancy, but it has the potential to greatly improve our ability to predict and prevent wars—something **you will have a real chance to contribute to** in this course. Indeed, economists and political scientists have already made use of this body of research to inform policy debates on topics ranging from the security effects of climate change to how to intervene to stop genocide.

The purpose of this class is to introduce you to the economic analysis of conflict. Since this approach is so new, we will start from scratch (**no background in conflict studies is assumed**) and work through some of the most important and influential research papers in this field. Some articles will present a theoretical model of some aspect of conflict; others will use statistical methods to detect patterns in the historical record or test theories. We will also read some less technical papers aimed at contributing to ongoing policy debates—including some not written by social scientists.

You will learn some of the methods used in the economic analysis of conflict, and be able to see the insights and clarity it brings to real, controversial, complicated questions of international security. In particular, you will learn to assess the strengths and weaknesses of alternative theories and to identify the limitations of statistical and qualitative analyses. These methods are used throughout economics, and increasingly in political science and sociology. This course will help you to **develop your technical skills as a producer of research and also your sophistication as a consumer of research**, something that will be valuable to you throughout your time at Harvard and beyond.

Requirements

Preparation and Participation (20%):

Careful, thorough reading of the assigned papers before class and participating thoughtfully in class are essential to the value of this course.

Some of these papers will be hard going: they may use mathematics you don't know, or refer to historical cases of conflict that are unfamiliar to you. Understanding these papers means poring over them, taking pains to read and re-read them until you have grasped the key results. Doing this well will require you to spend much more time reading each paper than you are used to; do not be fooled by the appearance of "light" reading loads each week. The number of pages assigned each week is modest so that you can devote substantial time to each article. Comprehending the main results of a paper that is mathematically over your head is an essential skill for an economics student, and this course will help you to learn it.

Attendance is mandatory. In class, we will often discuss the key assumptions and results of the readings, how to test the posited theories, how to improve upon an author's model, and how to interpret empirical findings and address their limitations. Your active contribution to the discussion will help to improve your classmates' understanding of the readings and your own.

Response Papers (10%): 3 papers of 1–2 pages each. For a response paper, you can offer a critique of one of the readings, suggest an extension or new application of a theoretical model, or describe a possible improvement to an empirical analysis. The intent is to cause you to think critically about the readings—to discover their flaws and generate ideas for improvements. Due dates appear in the schedule below.

Policy Brief (10%): 3–4 pages and a short presentation. You will write a short memorandum analyzing a current issue in international security and making recommendations for policy-makers,

and present your work in class on February 28, to be debated with your classmates. This will help you to learn how to write and speak for a non-specialized audience, an essential skill for practicing economists.

Empirical Exercise (15%): 4–6 pages. With a partner, you will apply statistical analysis to one of the available war datasets to discover something new about conflict. We will discuss guidelines for this assignment in class on March 7, and you will present your methods and results in class on March 21. This exercise will develop your data analysis skills.

Paper Proposal (5%): 3–4 pages. Write a proposal for the final research paper, stating your question and outlining the approach you will take to answering it and the results you expect to find. Email it to the class by April 22 at 11:59pm, and present it to both sections of this tutorial in a double class on April 25 (time to be scheduled). This gives you a chance to get feedback on your ideas while your final paper is still in progress.

Research Paper (40%): 15–18 pages. You will write a paper that makes an original contribution to our understanding of conflict, whether building a new model, extending an existing one, or conducting an empirical analysis. It is due on May 1 at 11:59pm.

Late Policy: Because the policy brief, the empirical exercise, and the paper proposal will all be presented in class, late submission of these assignments will not receive any credit. If you need to, you may submit one response paper up to a week late, with no questions asked as long as you email me before the deadline to let me know you'll be taking the extension. If you submit the final paper late, you will lose half a letter grade for each day late, up to five days, after which you will not receive any credit. Exceptions to this policy for personal emergencies will be granted at my discretion.

Schedule and Readings

Readings are to be completed by the beginning of section on the date listed. Some of the readings build in a sequence: it will be easier to understand them if you read them in the order listed.

Basic Facts and Theories (2 meetings)

How frequently do wars occur? How destructive are they? Are most wars between countries or within them? How is war changing over time? Why do wars occur? Can we predict them?

January 31:

- o Meredith Reid Sarkees et al., 2003. "Inter-State, Intra-State, and Extra-State Wars: A Comprehensive Look at Their Distribution over Time, 1816–1997." *International Studies Quarterly* 47(1): 49–70.
- o Nathaniel Beck, Gary King, and Langche Zeng, 2000. "Improving Quantitative Studies of International Conflict: A Conjecture." *American Political Science Review* 94(1): 21–35.

February 2:

- Jack Hirschleifer, 1995. “Anarchy and Its Breakdown.” *Journal of Political Economy* 103(1): 27–52.
- James Fearon, 1995. “Rationalist Explanations for War.” *International Organization* 49(3): 379–414.

Wars between Countries (3 meetings)

How do international economic relations affect conflict between nations? Do trade or foreign investment encourage peace? Under what conditions is international conquest profitable for the conqueror?

February 7:

- Omar Keshk, Brian Pollins, and Rafael Reuveny, 2004. “Trade Still Follows the Flag: The Primacy of Politics in a Simultaneous Model of Interdependence and Armed Conflict.” *Journal of Politics* 66(4): 1155–1179.
- Havard Hegre, John Oneal, and Bruce Russett, 2010. “Trade Does Promote Peace: New Simultaneous Estimates of the Reciprocal Effects of Trade and Conflict.” *Journal of Peace Research* 47(6): 763–774.

February 9:

- Stephen Brooks, 1999. “The Globalization of Production and the Changing Benefits of Conquest.” *Journal of Conflict Resolution* 43(5): 646–670.
- Solomon Polachek et al., 2007. “The Impact of Foreign Direct Investment on International Conflict.” *Defense and Peace Economics* 18(5): 415–429.
- Erik Gartzke, 2007. “The Capitalist Peace.” *American Journal of Political Science* 51(1): 166–191.

February 14:

- Peter Liberman, 1993. “The Spoils of Conquest.” *International Security* 18(2): 125–153.
- Erik Gartzke and Dominic Rohner, 2010. “The Political Economy of Imperialism, Decolonization, and Development.” Working paper.
- Erik Gartzke and Dominic Rohner, 2010. “To Conquer or Compel: War, Peace, and Economic Development.” Working paper.

Wars within Countries (3 meetings)

Does inter-ethnic hatred cause civil wars? Why are countries with abundant natural resources more prone to civil wars? What can be done to stop civil wars?

February 16:

- Ch. 1 of Robert Kaplan, 1993. *Balkan Ghosts*. Picador.
- James Fearon and David Laitin, 1996. “Explaining Interethnic Cooperation.” *American Political Science Review* 90(4): 715–735.
- James Fearon and David Laitin, 2003. “Ethnicity, Insurgency, and Civil War.” *American Political Science Review* 97(1): 75–90.

February 21: NO CLASS (President's Day)

February 23:

- Paul Collier and Anke Hoeffler, 2004. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56(4): 563–595.
- James Fearon, 2005. "Primary Commodity Exports and Civil War." *Journal of Conflict Resolution* 49(4): 483–507.
- Thad Dunning, 2005. "Resource Dependence, Economic Performance, and Political Stability." *Journal of Conflict Resolution* 49(4): 451–482.

February 28: Presentation of policy brief.

March 2:

- James Fearon, 2004. "Why Do Some Civil Wars Last So Much Longer Than Others?" *Journal of Peace Research* 41(3): 275–301.
- Virginia Fortna, 2004. "Does Peacekeeping Keep Peace? International Intervention and the Duration of Peace After Civil War." *International Studies Quarterly* 48(2): 269–292.
- Edward Luttwak, 1999. "Give War a Chance." *Foreign Affairs* 78(4).

March 7: Description of empirical exercise.

March 9, 14, 16: NO CLASS (Spring Break)

March 21: Presentation of empirical exercises.

Terrorism (3 meetings)

When and where does terrorism arise? What sort of people become terrorists? How are terrorist groups organized? Does terrorism work?

March 23:

- Alan Kreuger and Jitka Maleckova, 2003. "Education, Poverty, and Terrorism: Is There a Causal Connection?" *Journal of Economic Perspectives* 17(4): 119–144.
- Ethan Bueno de Mesquita, 2005. "The Quality of Terror." *American Journal of Political Science* 49(3): 515–530.

March 28:

- Laurence Iannaccone and Eli Berman, 2006. "Religious Extremism: The Good, the Bad, and the Deadly." *Public Choice* 128(1–2): 109–129.
- Eli Berman and David Laitin, 2008. "Religion, Terrorism, and Public Goods: Testing the Club Model." *Journal of Public Economics* 92(10–11): 1942–1967.

March 30:

- Andrew Kydd and Barbara Walter, 2002. "Sabotaging the Peace: The Politics of Extremist Violence." *International Organization* 56(2): 263–296.
- Ethan Bueno de Mesquita, 2008. "Terrorist Factions." *Quarterly Journal of Political Science* 3(4): 399–418.

The Costs of War (3 meetings)

What are the costs of war? How long does it take to recover from a war? What are we giving up by preparing for war? How costly is the Iraq War? How costly were the alternatives?

April 4:

- Edward Miguel and Gerard Roland, 2010. “The Long-Run Impact of Bombing Vietnam.” *Journal of Development Economics*, in press.
- Alberto Abadie and Javier Gardeazabal, 2003. “The Economic Costs of Conflict: A Case Study of the Basque Country.” *American Economic Review* 93(1): 113–132.
- Valerie Cerra and Sweta Chaman Saxena, 2008. “Growth Dynamics: The Myth of Economic Recovery.” *American Economic Review* 98(1): 439–457.

April 6:

- Hazem Adam Ghobarah, Paul Huth, and Bruce Russett, 2003. “Civil Wars Kill and Maim People—Long After the Shooting Stops.” *American Political Science Review* 97(2): 189–202.
- Christopher Blattman and Jeannie Annan, 2010. “The Consequences of Child Soldiering.” *Review of Economics and Statistics* 92(4): 882–898.
- Malcolm Knight, Norman Loayza, Delano Villanueva, 1996. “The Peace Dividend: Military Spending Cuts and Economic Growth.” *IMF Staff Papers* 43(1): 1–37.

April 11:

- Linda Bilmes and Joseph Stiglitz, 2006. “The Economic Costs of the Iraq War: An Appraisal Three Years After the Beginning of the Conflict.” *NBER Working Paper* no. 12054.
- Steven Davis, Kevin Murphy, and Robert Topel, 2006. “War in Iraq Versus Containment.” *NBER Working Paper* no. 12092.

Economic Crises, Climate Change, and War (2 meetings)

Can bad economic shocks lead to conflict? Has climate change caused wars in the past? What are the security risks of global warming?

April 13:

- Marshall Burke et al., 2009. “Warming Increases the Risk of Civil War in Africa.” *Proceedings of the National Academy of Sciences* 106(49): 20670–20674. And supplement.
- Halvard Buhaug, 2010. “Climate not to Blame for African Civil Wars.” *Proceedings of the National Academy of Sciences* 107(38): 16477–16482.
- Erik Gartzke, 2010. “Could Climate Change Cause Peace?” Working paper.
- Kurt Campbell et al., 2007. *The Age of Consequences: The Foreign Policy and National Security Implications of Global Climate Change*. Center for Strategic and International Studies. pp. 5–22.

April 18:

- Muhammet Bas and Andrew Coe, 2010. “Trying Times and Civil Conflict.” Working paper.
- Edward Miguel, Shanker Satyanath, and Ernest Sargent, 2004. “Economic Shocks and Civil Conflict: An Instrumental Variables Approach.” *Journal of Political Economy* 112(4): 725–753.

Proliferation (1 meeting)

Why are wars fought over a country's (suspected) possession of weapons of mass destruction? Can proliferation be stopped? Would North Korea sell a nuclear weapon?

April 20:

- Sandeep Baliga and Tomas Sjoström, 2008. "Strategic Ambiguity and Arms Proliferation." *Journal of Political Economy* 116(6): 1023–1057.
- Andrew Coe, 2005. "North Korea's New Cash Crop." *The Washington Quarterly* 28(3): 73–84.

Paper Proposal Presentations (2 meetings)

April 25: DOUBLE CLASS (to be scheduled)

Conclusions (1 meeting)

April 27