Syllabus Political Economy II: Conflict and Cooperation (MECS 540-2) Sandeep Baliga baliga@kellogg.northwestern.edu March, 2024 (SUBJECT TO CHANGE)

Time and Location: Kellogg Global Hub Room 4273, Tue 3.30–6.30 pm. I will teach in person.

Prerequisites: Economics Core Microeconomics sequence 410.1-410.3 or Permission of Instructor

Useful background reading:

1. Robert Gibbons, *Game Theory for Applied Economists, Princeton University Press*, 1992. [Advanced Undergraduate]

2. Andreu Mas-Colell, Michael Whinston, and Jerry Green, *Microeconomic Theory*, Oxford University Press, 1995. [PhD Core; Chapters 7-9, 11-14 and 23]

3. Drew Fudenberg and Jean Tirole, *Game Theory*, MIT Press, 1991. [Advanced; Chapter 10]

4. Abhinay Muthoo (1999): *Bargaining Theory with Applications*, Cambridge University Press.

5. Joseph Nye (2007): Understanding International Conflict (6th Edition). Longman Classics in Political Science. Longman: New York City [Undergraduate introduction to conflict studies]

Description of the Course

This course will offer a theoretical treatment of conflict. Strategic interaction within and across nations involves conflict and cooperation. Disagreement between a country's population and its leadership can cause internal conflict, oppression and terrorism. Disagreement between countries can lead to war, costly arms races and impede economic development. Conflict often arises even though there is some cooperative solution that would have satisfied all the relevant actors. We will study the fundamental causes of conflict (positive analysis) and possible solutions that create cooperation (normative analysis).

Positive analyses will focus on conflict caused by payoff uncertainty or asymmetric information, the inability to commit to honor agreements, income inequality, fractionalization of the population into distinct and antagonistic groups and extremists who attempt to manipulate conflict to achieve their ends. This part of the course will cover topics such as the reciprocal fear of surprise attack, global games, wars of attrition, bargaining and coalitionformation.

Normative analyses will focus on communication, mechanism design and institutions and their impact on cooperation. Communication of motives or confidence-building measures, such as allowing arms inspections, may diffuse tension. Or they may increase the chances of conflict by exposing motives or the strength or weakness of a country's arms capabilities. Asymmetric information may preclude implementation of cooperation even when transfers are available and it is possible to fully commit. Similarly, "moral hazard" arising from a leader's desire for political survival will affect the chances of conflict or cooperation. Different institutions have different commitment properties. For example, democratization gives the citizens a permanent voice in collective decision-making. This influences their incentives to revolt or accept the decisions of a leader.

These issues apply equally across countries and can cause war or within a country and cause civil war. While the course is theoretical, we will offer stylized facts about war and civil war as motivation and a guide to interesting unexploited questions and puzzles. Unlike many topics in economics and political science, these issues are under-explored. We hope to generate interesting research questions.

Grading

The grade will be based on a student presentation of a paper. Presentation involves preparing slides, a coherent description of the paper's motivation, intuition for the results and a discussion of open questions and any limitations of the analysis. Papers can be picked from * papers below, related research that is work in progress or any others papers of interest after discussion with the instructor.

1.Hobbesian Models

Thomas Hobbes (1651): Leviathan, or the Matter, Forme, and Power of a Commonwealth, Ecclesiasticall and Civil, http://www.earlymoderntexts.com/f hobbes.html [Focus on Chapters 13, 14, 15, 17-24, 26, 29, (they are short)]

Nicolas Berman, Mathieu Couttenier, Dominic Rohner and Mathias Thoenig: "This mine is mine! How minerals fuel conflicts in Africa," *American Economic Review*, 2017, 107: 1564-1610.

Dagobert Brito and Michael Intriligator (1985): "Conflict, War and Redistribution", American Political Science Review, 79:943-957.

Ron Gurantz and Alex Hirsh: "Fear, Appeasement, and the Effectiveness of Deterrence," forthcoming at the *Journal of Politics*.

Jack Hirshleifer (1994) "The Dark Side of the Force", *Economic Inquiry*, 32: 1-10. Matthew Jackson and Massimo Morelli (2009): "Strategic Militarization, Deterrence and

War between Nations", Quarterly Journal of Political Science Vol. 4, Iss. 3, 279-313.

James Jordan (2006): "Pillage and Property", *Journal of Economic Theory*, Vol. 131, No. 1, November, pp. 26-44.

James Jordan (2001): "Majority Rule with Dollar Voting", *Review of Economic Design*, 6: 343-352

Boaz Moselle and Benjamin Polak (2001): "A Model of a Predatory State". *J Law Econ* Organ. 17: 1-33

Robert Powell (1993): "Guns, Butter and Anarchy", *American Political Science Review*, Vol.87, No. 1, pp. 115-132.

Stergios Skaperdas (1992): "Cooperation, Conflict and Power in the Absence of Property Rights", *American Economic Review* 82: 720-739.

Stergios Skaperdas (1996) "Contest Success Functions," *Economic Theory* 7: 283-290.

2. Mutual Fear and Spiral Models

Sandeep Baliga and Tomas Sjöström (2011): "Conflict Games with Payoff Uncertainty", mimeo.

Hans Carlsson and Eric van Damme (1993): "Global Games and Equilibrium Selection", *Econometrica* 61, 989-1018.

Sylvain Chassang and Gerard Padro-i-Miquel (2010): "Conflict and Deterrence Under Strategic Risk", *Quarterly Journal of Economics*, 125(4): 1821-1858, November.

*James Fearon (2018): "Cooperation, Conflict, and the Costs of Anarchy," *International Organization* (forthcoming 2018).

Robert Jervis (1978): "Cooperation Under the Security Dilemma," World Politics 30, 167-214.

Andrew Kydd (1997): "Game Theory and the Spiral Model", World Politics 49, 371-400.
Stephen Morris and Hyun Shin (2003): "Global Games: Theory and Applications," in Advances in Economics and Econometrics (Proceedings of the Eighth World Congress of the Econometric Society), edited by M. Dewatripont, L. Hansen and S. Turnovsky. Cambridge: Cambridge University Press, 56-114.

Stephen Morris and Hyun Shin (2005): "Heterogeneity and Uniqueness in Interaction Games," in *The Economy as an Evolving Complex System III*, edited by L. Blume and S. Durlauf; Oxford University Press, Santa Fe Institute Studies in the Sciences of Complexity.

Dominic Rohner and Matthias Thoenig (2016): "War Signals: A Theory of Trade, Trust and Conflict", *Review of Economic Studies*, 80 (3), pp. 1114-1147.

Thomas Schelling (1963): The Strategy of Conflict, London and New York, Oxford University Press. Chapter 9, first two pages

Thucydides (1972). The History of the Peloponnesian War, Penguin Classics, London. [Chapter 1 is a classic]

2.1 Communication and Deception

Robert Aumann (1990): "Nash Equilibria are Not Self-Enforcing", in J. J. Gabszewicz, J.-F. Richard and L. A. Wolsey (eds.), *Economic Decision-Making: Games, Econometrics and Optimization* (Amsterdam: Elsevier).

Sandeep Baliga and Tomas Sjöström (2004): "Arms Races and Negotiations", *Review of Economic Studies* 71: 351-369.

Sandeep Baliga and Tomas Sjöström (2008): "Strategic Ambiguity and Arms Proliferation", Journal of Political Economy, 116 (6), 1023-1058.

3. Bargaining Models

Ronald Coase (1960): "The Problem of Social Cost", *Journal of Law and Economics*, Vol. 3, pp. 1-44.

James Fearon (1995): "Rationalist Explanations for War", *International Organization*, Vol. 49, No. 3, pp. 379-414.

*Alex Wolitzky (2023): "Unobserved Offer Bargaining," American Economic Review, January.

*Dino Gerardi, Lucas Maestri and Ignacio Monzón (2022): "Bargaining over a Divisible Good in the Market for Lemons, *American Economic Review*, 2022, 112, 1591-1620.

3.1 Asymmetric Information and Mechanism Design

Jeff Banks (1990): "Equilibrium Behavior in Crisis Bargaining Games", American Journal of Political Science 34(3).

Helmut Bester and Karl Wärneryd (2006): "Conflict and the Social Contract", Scandinavian Journal of Economics, 108: 231-249

Mark Fey and Kristopher Ramsay (2010): "Uncertainty and Incentives in Crisis Bargaining: Game-Free Analysis of International Conflict", *American Journal of Political Science*, 55(1): 149-169.

Mark Fey and Kristopher Ramsay (2009): "Mechanism Design Goes to War: Peaceful Outcomes with Interdependent and Correlated Types", *Review of Economic Design*, 13(3): 233-250.

Johannes Horner, Massimo Morelli and Francesco Squintani, "Mediation and Peace," *Review of Economic Studies*, forthcoming.

Adam Meirowitz, Massimo Morelli and Kris Ramsay, "Dispute Resolution Institutions and Strategic Militarization", (2017), *Journal of Political Economy*, forthcoming.

3.2 Shifting Power and Lack of Commitment

James Fearon (1996): "Bargaining over Objects that Influence Future Bargaining Power", mimeo, Stanford.

3.3 Bargaining and Commitment

John Nash (1950): "The Bargaining Problem," Econometrica, 18 (2), 155-162.

Thomas Schelling (1963): *The Strategy of Conflict*, London and New York, Oxford University Press. **Chapter 2**

Sandeep Baliga and Tomas Sjöström (2020): "The Strategy of Conflict and the Technology of War", JPE.

Vincent Crawford (1982): "A Theory of Disagreement in Bargaining", *Econometrica*, 607-638

*Deepal Basak, Joyee Deb (2020): "Gambling over Public Opinion". AER.

Abhinay Muthoo (1996): "A Bargaining Model Based on the Commitment Tactic", Journal of Economic Theory, 134-152

4. Moral Hazard/Democratic Peace

Daron Acemoglu, Michael Golosov, Aleh Tsyvinski and Pierre Yared, "A Dynamic Theory of Resource Wars", *Quarterly Journal of Economics*, 127 (1), pp. 283-331, February 2012

Sandeep Baliga, David Lucca and Tomas Sjöström (2011): "Domestic Political Survival and International Conflict: Is Democracy Good for Peace?", *Review of Economic Studies*, 78, 458–486.

Bruce Bueno de Mesquita, James Morrow, Randy Siverson and Alastair Smith (1999): "An Institutional Explanation of the Democratic Peace," *American Political Science Review*, Vol. 93, No. 4, pp.791-807.

Francesco Caselli, Massimo Morelli and Dominic Rohner, "The Georgraphy of Interstate Wars," *Quarterly Journal of Economics*, forthcoming.

Michael Doyle (1986): "Liberalism and World Politics", American Political Science Review, Vol. 80 No.4, pp. 1151-169.

James Fearon (1994): "Domestic Political Audiences and the Escalation of International Disputes", American Political Science Review, 88, 577-592.

Matthew Jackson and Massimo Morelli (2007): "Political Bias and War," American Economic Review, 97: 1353-1373

Immanuel Kant [1795] (1991): "Toward Perpetual Peace: A Philosophical Sketch". in Reiss, Kant's Political Writings, Cambridge University Press, pp. 93-130.

Gilat Levy and Ronny Razin (2004): "It takes Two: An Explanation for the Democratic Peace", *Journal of the European Economic Association*, 2, 1-29.

*Philippe Martin, Thierry Mayer, Mathias Thoenig (2008): "Make Trade Not War," *Review of Economic Studies*, 75 (3), 865-900.

Bruce Russett (1993): Grasping the Democratic Peace: Principles for a Post-Cold War World, Princeton University Press: Princeton N.J.

5. Wars of Attrition and Bargaining

Dilip Abreu and Faruk Gul (2000): "Bargaining and Reputation", *Econometrica* 68(1), 85-117.

*Jack Fanning and Alex Wolitzky, "Reputational Bargaining," in Bargaining: Current Research and Future Directions, Palgrave MacMillan (2022).

James Fearon (2013): "Fighting rather than Bargaining", mimeo, Stanford.

Kenneth Hendricks, Andrew Weiss and Charles Wilson (1988): "The War of Attrition with Complete Information in Continuous Time", *International Economic Review*, 29: 663 Roger Myerson (1991): *Game Theory: Analysis of Conflict.* Harvard University Press. Chapter 8, sections 8.7 and 8.8.

Clara Ponsati and Josef Sakovics (1995): "The War of Attrition with Incomplete Information", *Mathematical Social Sciences*, 29: 239-254.

*Robert Powell, "Taking Sides in Wars of Attrition," *American Political Science Review*, Volume 111, Issue 2, May 2017, pp. 219 - 236

Powell, Robert. 2004a. "Bargaining and Learning While Fighting." American Journal of Political Science 48(2):344–361.

6. Terrorism and Counterterrorism/Insurgency and Counterinsurgency

*Daron Acemoglu, Ali Cheema, Asim I. Khwaja and James A. Robinson: "Trust in State and Non-State Actors: Evidence from Dispute Resolution in Pakistan," 2018

April 2018

Sandeep Baliga and Tomas Sjöström (2012): "The Strategy of Manipulating Conflict", American Economic Review, October 2012, 102(6): 2897-2922.

Sandeep Baliga and Jeff Ely (2015): "Torture and the Commitment Problem", *Review* of *Economic Studies*, forthcoming.

Eli Berman, Jacob Shapiro and Joseph Felter (2011): "Can Hearts and Minds be Bought? The Economics of the Counterinsurgency in Iraq", *Journal of Political Economy*, 119(41): 766-819.

Eli Berman and David Laitin (2008): "Religion, Terrorism and Public Goods: Testing the Club Model," *Journal of Public Economics*, 92: 1942–1967

Ethan Bueno de Mesquita (2005): "The Quality of Terror", American Journal of Political Science 49:3, 515-530

Ethan Bueno de Mesquita (2010): "Regime Change and Revolutionary Entrepreneurs," American Political Science Review, 104(3): 446-466.

Tiberiu Dragu (2011): "Is There a Trade-off Between Security and Liberty? Executive Bias, Privacy Protections, and Terrorism Prevention," *American Political Science Review* 105 (1): 64-78.

Tiberiu Dragu (2017): "The Moral Hazard of Terrorism Prevention," *Journal of Politics*, Forthcoming

Joan Esteban, Massimo Morelli and Dominic Rohner, "Strategic Mass Killings", Journal of Political Economy, forthcoming.

*James D. Fearon and David D. Laitin, "Ethnicity, Insurgency and Civil War," *American Political Science Review* 97, 1 (February 2003), 75-90.

Laurence Iannaccone and Eli Berman (2006): "Religious Extremism: The Good, the Bad and the Deadly," *Public Choice.*

7. Fractionalization, Inequality and Conflict

Jean-Yves Duclos, Joan Esteban & Debraj Ray (2004): "Polarization: Concepts, Measurement, Estimation", *Econometrica* 72(5): 1737–1772.

Joan Esteban and Debraj Ray (2008): "On the Salience of Ethnic Conflict, American Economic Review, 98(5), 2185-2202.

Joan Esteban and Debraj Ray (2010): "Linking Conflict to Inequality and Polarization, forthcoming, *American Economic Review*, 101, 1345-1374.

22- Grievance Shocks and Coordination in Collective Action. Online Appendix. With Sofia Correa and Gaetan Nandong. 2023. Accepted at American Journal of Political Science.

8. Democratization, State Repression and Foundations of the State

Daron Acemoglu and James Robinson (2000): "Why Did the West Extend the Franchise? Democracy, Inequality and Growth in Historical Perspective", *Quarterly Journal of Economics* 115: 1167-99.

Daron Acemoglu and James Robinson (2001): "A Theory of Political Transitions", American Economic Review 91 (4): 938-963.

Daron Acemoglu and James Robinson (2006): *Economic Origins of Dictatorship and Democracy*, Cambridge University Press.

*Avidit Acharya, David Laitin and Anna Zhang: "Sons of the Soil: A Model of Assimilation and Population Control," *Journal of Theoretical Politics*, Volume 30, April 2018, pp. 184-223.

Publications

*Dan Bernhardt, Stefan Krasa and Mehdi Shadmehr (2022): "Demagogues and the Economic Fragility of Democracy," *American Economic Review*, 112(10): 3331-66.

*Tim Besley and Torsten Persson (2009): "The Origins of State Capacity: Property Rights, Taxation and Politics," *American Economic Review*, 99(4), 1218-44, 2009.

*Timothy Besley and Hannes Mueller (2012): "Estimating the Peace Dividend: The impact of violence on house prices in Northern Ireland," *American Economic Review*.

James Fearon, "Self-Enforcing Democracy", *Quarterly Journal of Economics*, 126 (November 2011), 1661-1708.

Alessandro Lizzeri and Nicola Persico (2004): "Why Did the Elites Extend the Suffrage? Democracy and the Scope of Government, With an Application to Britain's 'Age of Reform," *Quarterly Journal of Economics* 119 (2): 707-65.

*Massimo Morelli, Laura Ogliari and Long Hong: "Power Mismatch and Civil Conflict: An Empirical Investigation," mimeo, Bocconi

*Stephen Morris and Mehdi Shadmehr (2023): "Repression and Repertoires," AER: insights.

*Stephen Morris and Mehdi Shadmehr (2022): "Inspiring Regime Change," Journal of the European Economic Association 21(6): 2635-81.

Roger Myerson, "The Autocrat's Credibility Problem and Foundations of the Constitutional State," *American Political Science Review* 102 (2008), 125-139.

Robert Powell (2006): "War as a Commitment Problem," International Organization, 60, 1 (Winter), 169-203.

9. Alliances and Networks

*Michael König, Dominic Rohner, Mathias Thoenig and Fabrizio Zilibotti: "Networks in Conflict: Theory and Evidence from the Great War of Africa," *Econometrica*, 2017, 85: 1093-1132

*Dziubinski, M., Goyal, S. and Minarsch, D. E. N (2017): "The Strategy of Conquest,"

*Francesco Trebbi and Eric Weese (2018): "Insurgency and Small Wars: Estimation of Unobserved Coalition Structures," *Econometrica*