

SANDEEP BALIGA

(April 2022)

J.L. Kellogg School of Management (M.E.D.S.),

2211 Campus Drive,

Evanston IL 60208

Telephone: (847) 467-4613

e-mail: baliga@kellogg.northwestern.edu

Research: <http://www.kellogg.northwestern.edu/faculty/baliga/htm/research.htm>

Current Position

John L and Helen Kellogg Professor,
Department of Managerial Economics and Decision Sciences,
Kellogg School of Management.

Other positions

1997-present: Department of Managerial Economics and Decision Sciences,
Kellogg School of Management.

Spring 2015: Visiting Professor, Harvard University

2009-2010: Visiting Scholar and Lecturer (BU) and Visiting Associate Professor (M.I.T.).

2000-2001: Member, Institute for Advanced Study, Princeton.

1993-1997: Berry-Ramsey Junior Research Fellow, King's College, Cambridge University.

Other Affiliations

Director, Initiative on Conflict and Cooperation, Ford Center for Global Citizenship

Zell Center Faculty Fellow

Faculty Affiliate, Center for the Study of Industrial Organization

Faculty Affiliate, Buffett Institute for Global Studies

Education

1989 to 1993: Ph.D. program in Economics at Harvard University (degree received in November 1993; thesis title "Uncertainty in Implementation and Bargaining").

1985 to 1988: B.A. degree from Cambridge University. Graduated with a double first class honors degree (equivalent of summa cum laude).

Published Articles

1. "The Causes of War," with Tomas Sjöström, forthcoming, *Handbook of the Economics of Conflict*. Edited by Oeindrila Dube, Massimo Morelli, Debraj Ray and Tomas Sjöström. North Holland
2. "Deterrence with Imperfect Attribution," with Ethan Bueno de Mesquita and Alex Wolitzky, *American Political Science Review*, 2020, 114, 4, 1155-1178.
See "The Case for a Cyber Deterrence Strategy that Works," with Ethan Bueno de Mesquita and Alex Wolitzky, in *The National Interest*, March 5, 2019 for a popular interest version.
3. "The Strategy and Technology of Conflict," with Tomas Sjöström, *Journal of Political Economy*, 2020, 128, 8, 3186-3219

4. "Torture and the Commitment Problem," with Jeffrey Ely, *Review of Economic Studies*, October 2016, 83, 1406–1439.
5. "Polarization and Ambiguity," with Eran Hanany and Peter Klibanoff, *American Economic Review*, December 2013, 103(7): 3071-83
6. "Bargaining and War: A Review of Some Formal Models," with Tomas Sjöström, *Korean Economic Review* Winter 2013, 29(2): 235-266.
7. "The Strategy of Manipulating Conflict" with Tomas Sjöström, *American Economic Review*, October 2012, 102(6): 2897-2922
8. "Mnemonomics: The Sunk Cost Fallacy as a Memory Kludge," with Jeffrey Ely, *American Economic Journal: Microeconomics*, November 2011, 3, 35-67.
9. "Domestic Political Survival and International Conflict: Is Democracy Good for Peace?" with David Lucca and Tomas Sjöström, *Review of Economic Studies*, April 2011, Vol. 78, No. 2, 458–486.
10. "The Hobbesian Trap," with Tomas Sjöström, forthcoming, *Oxford Handbook of the Economics of Peace and Conflict*, eds. Michelle Garfinkel and Stergios Skaperdas, OUP: Oxford, 2011.
11. "Liquidity and Manipulation of Executive Compensation Schemes," with Ulf Axelson, *Review of Financial Studies*, October 2009, Vol. 22, No. 10: 3907-3939
12. "Contracting with Third Parties," with Tomas Sjöström, *American Economic Journal: Microeconomics*, Vol. 1, No. 1, February 2009, 75-100.
13. "Strategic Ambiguity and Arms Proliferation," with Tomas Sjöström, *Journal of Political Economy*, December 2008, Vol. 116, No. 6: 1023-1057
14. "Market Forces meet Behavioral Biases: Cost-Misallocation and Irrational Pricing," with Nabil Al-Najjar and David Besanko (former title "The Sunk Cost Bias and Managerial Pricing Practices"), *RAND Journal of Economics*, Vol. 30, pp 214-237, Spring 2008.
15. "Mechanism Design: Recent Developments," with Tomas Sjöström, *New Palgrave Dictionary of Economics, 2nd Edition* (editors Lawrence Blume and Steven Durlauf), 2008
16. "Durable Cheap Talk Equilibria," with Tomas Sjöström, forthcoming, *Advances in Applied Economics Communication Games*, Richard Harbaugh, editor, Elsevier.
17. "Arms Races and Negotiations," with Tomas Sjöström, *Review of Economic Studies*, Vol. 71, No. 2, April 2004
18. "The Emergence and Persistence of the German and Anglo-Saxon Financial Systems," with Ben Polak, *Review of Financial Studies*, Vol. 17, No. 1, pp 129-163, Spring 2004.
19. "Market Research and Market Design," with Rakesh Vohra, *Advances in Theoretical Economics*, Vol. 3, Issue 1, Article 5, 2003.
20. "Mechanism Design for the Environment," with Eric Maskin, *Handbook of Environmental Economics, Vol. 1*, series eds. K. Arrow and M. Intriligator, vol. Eds. K. Maler and J. Vincent. Elsevier Science: Berlin, 2003
21. "Coordination, Spillovers and Cheap-Talk," with Stephen Morris, *Journal of Economic Theory*, 105(2), pp 450-468, August 2002.
22. "The Not-So-Secret-Agent: Professional Monitors, Hierarchies and Implementation," *Review of Economic Design*, Vol. 7, pp 17-26, 2002.
23. "Optimal Design of Peer Review and Self-Assessment Mechanisms," (former title "Not Invented Here"), with Tomas Sjöström, *RAND Journal of Economics*, pp 27-51, Spring 2001.
24. "Multilateral Negotiations with Private Side-Deals: A Multiplicity Example," with Roberto Serrano, *Economic Bulletin*, 3, pp 1-7, 2001.
25. "Renegotiation in Repeated Games with Side-Payments," with Robert Evans, *Games and Economic Behavior*, 33, pp 159-176, November 2000.
26. "Collusion, Renegotiation and Implementation," with Sandro Brusco, *Social Choice and Welfare* 17, pp 69-83, January 2000.

27. "Monitoring and Collusion with 'Soft' Information," *Journal of Law, Economics and Organization*, 15(2), pp 434-440, July 1999.
28. "Implementation in Incomplete Information Environments: the Use of Multi-Stage Games," *Games and Economic Behavior*, 27, pp 173-183, May 1999.
29. "Interactive Implementation," with Tomas Sjöström, *Games and Economic Behavior*, 27, pp 38-63, April 1999.
30. "Decentralization and Collusion," with Tomas Sjöström, *Journal of Economic Theory* 83(2), pp 196-232, December 1998. To be reprinted in *Recent Developments in the Economic Theory of Incentives*, edited by David Martimort,
31. "The Theory of Implementation when the Planner is a Player," with Luis Corchon and Tomas Sjöström, *Journal of Economic Theory*, 77(1), pp 15-33, November 1997.
32. "Multilateral Bargaining with Imperfect Information," with Roberto Serrano, *Journal of Economic Theory*, 67(2), pp 578-589, December 1995.

Working Papers

"Long Wars," (2022) with Tomas Sjöström

"Optimal Sanctions," (2022) with Tomas Sjöström

(Op-ed published in Crain's Business Chicago Feb 25, 2022, "How to Sanction Putin and Make it Count".
Article in ProMarket April 22, 2002, "How to Optimize Sanctions.")

"A Theory of the Firm based on Hagglng, Coordination, and Rent-Seeking," (2018) with Tomas Sjöström

"Negotiations with Side-Deals," with Roberto Serrano. (Not intended for publication)

Work-in-Progress

Hobbesian Models of Conflict, with Tomas Sjöström (Book Project (PhD level)).

Editorial Positions and Refereeing

Managing Editor, *B.E. Press Journals in Theoretical Economics* (resigned Feb 2013)

Associate Editor, *European Economic Review* (2004-2009)

Co-Editor and Co-Creator of Blog, *Cheap Talk* (cheaptalk.org)

Refereeing: *American Economic Review*, *American Political Science Review*, *Economic Journal*, *Economic Letters*, *Econometrica*, *Games and Economic Behavior*, *International Journal of Game Theory*, *International Journal of Industrial Organization*, *Journal of Conflict Resolution*, *Journal of Economic Theory*, *Journal of Institutional and Theoretical Economics*, *Journal of Political Economy*, *Journal of Public Economics*, *B.E. Press Journals in Theoretical Economics*, *Management Science*, *Marketing Science*, *Mathematical Social Sciences*, *NSF*, *Quarterly Journal of Economics*, *Quarterly Journal of Political Science*, *RAND Journal of Economics*, *Review of Economic Studies*, *Review of Economic Design*, *Review of Economic Dynamics*, *Scandinavian Journal of Economics*, *Social Choice and Welfare*.

Honors

Google Research Award 2014 for "Demand Estimation And Surplus Extraction in Multi-Unit Auctions" with Jeff Ely

Fellow, Center for Advanced Study in the Behavioral Sciences, 2012-2013 (declined)

Kellogg Impact Award 2009, awarded by Kellogg M.B.A. students

Fulbright Award for study in the United States, awarded in 1989 and 1990.

Macaulay Prize for Economics awarded by Cambridge University in 1988.

Wrenbury Award to fund further research in Economics.

Whytehead Prize for Economics awarded by Cambridge University in 1988.

Presentations

Sept 2021-: Cornell, Utah, Northwestern (Discussant), Smart Sanctions Conference.

Sept 2019-2021: California Institute of Technology

Sept 2018-Aug 2019: Rochester, Chicago, Nebraska.

Sept 2017-Aug 2018: Georgetown, PECA

September 2016-Aug 2017: AEA Meetings, Bocconi.

September 2015-August 2016: ASSET (Granada) 2015, Princeton, Priorat Political Economy Conference.

September 2014-Aug 2015: University of Wisconsin (Madison), Maskin Birthday Conference, UBC, WEA World Conference, WEA Summer 2015.

September 2013-August 2014: Cambridge University, HEC Montreal, NBER Org Econ, Warwick/Princeton Political Economy Conference, Western Economic Association Summer 2014.

September 2012-August 2013: Conflict and Cooperation Conference (keynote speaker, Bergamo Italy).

September 2011-August 2012: AEA Meetings (Chicago), Coordination and Communication (Ravello), Emory University, Kellogg Conflict and Cooperation Conference 2012, London School of Economics, MIT Sloan, Princeton Political Economy Conference, University of Warwick.

September 2010 – August 2011: Aspen Institute Meeting (Washington D.C.), University Autònoma Barcelona, University of Chicago (Harris), Kellogg Conflict and Cooperation Conference 2011, N.B.E.R. Political Economy, U.C.S.D., University of Western Ontario, Yale University.

September 2009-August 2010: Boston University, Columbia, Determinants of Conflict Conference Madrid, Harvard/M.I.T, M.I.T., Princeton, S.E.D. 2010, Stanford G.S.B., University of California Irvine.

September 2008- August 2009: Econometric Society Summer Meetings 2009 (invited speaker), E.S.S.E.T. 2009, Sixth CSEF-IGER Symposium on Economics and Institutions, New York University, University of California in Los Angeles (Anderson School), University of California in San Diego, Yale University (Rationality and Conflict).

September 2006-August 2008: American Political Science Association 2006, Berkeley, Chicago GSB, Econometric Society North-American Winter Meetings 2007 (invited session organizer), Georgetown, University of Indiana (Bloomington), Kellogg Conflict and Cooperation, Military Operations Research Society, N.B.E.R. (National Security) July 2006, N.B.E.R. (National Security) February 2007, Ohio State, University of Padova, University of Pennsylvania, Public Economic Theory Conference 2007 (invited speaker), Rice University, Society for Economic Dynamics 2006, University of Venice.

September 2003 – August 2006: Chicago G.S.B., M.E.D.S. Operations Conference, N.B.E.R. (Macroeconomics and Individual Decision-Making 2005), N.Y.U, University of British Columbia, UC

Davis, UCSD – Rady, UC Berkeley – Haas, University of Washington in Seattle, World Congress of Econometric Society 2005 in London.

January 1999 – August 2003: Caltech, Columbia University, Decentralization Conference 1999, Econometric Society Summer Meetings 2001 (Maryland), Econometric Society Summer Meetings 2002 (UCLA), Economic Design Meetings 2002 (NYU), Institute for Advanced Study, Kellogg Management and Strategy, Northwestern (Math Center), Princeton, Rochester, SITE Conference 1999, Stanford GSB, Stanford University, Texas A&M, University of California in Los Angeles, University of California in San Diego, University of Chicago, University of Maryland, University of North Carolina – Chapel Hill, University of Pennsylvania, University of Wisconsin (Madison), World Congress of Econometric Society 2000 in Seattle, Yale University.

September 1993 – December 1999: Alicante, Barcelona, Birkbeck, Birmingham, Bristol, Brown, Cambridge, C.O.R.E., Cornell, Duke, Essex, European University Institute, Harvard, Kellogg M.E.D.S., Michigan, Minnesota, Oxford, Princeton, Rochester, S.I.T.E. 1994, Southampton, Stanford G.S.B., U.L.B. Brussels, University College London, Wisconsin-Madison, World Congress of Econometric Society 1995 in Tokyo, Yale S.O.M.

Conference Organization

1. Program Committee for Second Workshop on Economics of Peer-to-Peer Systems, Harvard University, Cambridge MA, June 4-5, 2004.
2. Program Committee for Econometric Society Summer Meetings, 2003.
3. Program Committee for European Economic Association Meetings, Vienna, 2006.
4. Organizer, Cooperation and Conflict, March 2006, Kellogg School of Management.
5. Organizer, Cooperation and Conflict, November 2006, Kellogg School of Management.
6. Organizer, Cooperation and Conflict, November 2007, Kellogg School of Management.
7. Organizer, Cooperation and Conflict, November 2008, Kellogg School of Management
8. Organizer, Cooperation and Conflict, April 2011, Kellogg School of Management.
9. Organizer, Cooperation and Conflict, April 2012, Kellogg School of Management.
10. Program Committee for Econometric Society Summer Meetings, 2012
11. Organizer, Cooperation and Conflict, May 2013, Kellogg School of Management.
12. Organizer, Cooperation and Conflict, April 2016, Kellogg School of Management.
13. Program Committee for Econometric Society Summer Meetings, 2016.

Teaching Experience

2015 HKSG/HBS Core PhD Course.
2012- Managerial Economics, core M.B.A. course, EMBA Course
2011- Conflict and Cooperation, PhD
2009 PhD Advanced Contract Theory (BU) and PhD Core Contract Theory (M.I.T. 14.124)
2008- Values and Crisis Decision-Making, core M.B.A. course, Kellogg.
2004-2005 Advanced Microeconomics I, Kellogg PhD.
2002-2009 Competitive Strategy and Industrial Structure and Economics of Competition, MBA and EMBA elective courses, Kellogg
1999, 2001-03 Contract theory course for Kellogg and Economics PhDs.
1997-2002 Managerial Economics, core M.B.A. course, Kellogg
1995 Game Theory, senior undergraduates and graduate students, Cambridge University.

Outside Activities:

Ad Hoc Consultant, Eastman Chemical
Member, Business Advisory Committee, Obama-Biden 2012.

Ad Hoc Consultant, Business Forward.

Co-Founder, Cheap Talk LLC – A pricing consulting company

Work Experience:

1991 Worked on the Mongolian privatization program for Prof. J Sachs. Responsibilities included design of auctions for "small" and "large" privatization and pricing of vouchers used for purchase of state enterprises.

1988-1989 Management Consultant at Cooper's and Lybrand, London. Assignments included: analysis of price regulation of water companies; construction of British Rail's privatization strategy; study on the impact of 1992 on European airports; competition strategy of PowerGen (one of the two electricity generating companies post-privatization); advice on the Mars Confectionery Company's foreign currency hedging policy and Pakistan Electricity tariff study.