## Patrick T. Brandt

Political Science
School of Economic, Political and Policy Sciences
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May 5, 2013

## **Educational History**

Ph.D. May 2001, Indiana University, Bloomington, Indiana, Political Science

Dissertation: Lawmaking and separated powers: agenda setting in executive-congressional relations and budgeting.

M.S. June 1997, Northwestern University, Evanston, Illinois, Mathematical Methods in Social Sciences A.B. May 1994, College of William and Mary, Williamsburg, Virginia, Government

## Professional Experience

Associate Professor, Political Science, School of Economic, Political and Policy Sciences, University of Texas at Dallas, Richardson, Texas, 2010-present.

Instructor, "Advanced Time Series Analysis", Inter-university Consortium for Political and Social Research, University of Michigan, August 2012. Two week workshop.

Instructor, "Advanced Bayesian Models for the Social Sciences", Inter-university Consortium for Political and Social Research, University of Michigan, Each August 2008–2011. One week workshop on Bayesian time series models.

Faculty Associate, Center for Global Collective Action, University of Texas at Dallas, Richardson, Texas, 2007-present.

Assistant Professor, Political Science, School of Economic, Political and Policy Sciences, University of Texas at Dallas, Richardson, Texas, 2005-2010.

Assistant Professor, Department of Political Science, University of North Texas, Denton, Texas, 2001-2005.

Visiting Lecturer of American Politics and Methodology, Department of Political Science, Indiana University, Bloomington, Indiana, 2000-2001.

Research Fellow, Harvard-MIT Data Center, Cambridge, Massachusetts, January-June 2000.

## Research Interests

My research on political and social dynamics focuses on the development and application of time series models to forecast international relations, to explicate relationships among public opinion, economic policy and the economy, and to explain patterns of conflict and terrorism. The main time series models employed in this research involve Bayesian statistics, multiple equation or vector autoregression models, methods for producing and evaluating the quality of forecasts, the derivation of new models for time series of counts, and modeling structural change and endogenous shifts in data over time.

This research agenda has been funded by the National Science Foundation and the Center for Economic and Risk Analysis of Terrorist Events (CREATE).

## **Professional Memberships**

- American Political Science Association
- Midwest Political Science Association
- International Studies Association
- Society for Political Methodology

# Honors and other recognitions

Robert H. Durr Award, Midwest Political Science Association's prize for the best paper applying quantitative methods to a substantive problem at the 2006 meeting. Published as Sattler, Thomas, John R. Freeman and Patrick T. Brandt. 2008. "Popular Sovereignty and the Room to Maneuver: A Search for a Causal Chain" *Comparative Political Studies*. 41(9): 1212–1239.

# Awards and Fellowships

Research Fellow, Workshop in Political Theory and Policy Analysis, Indiana University, Fall 1999.

John V. Gillespie Memorial Scholarship, Department of Political Science, Indiana University, Summer 1999.

Political Science Departmental Fellowship, Indiana University, 1994–1996.

Governor's Fellow, Governor's Commission on Government Reform, Richmond, Virginia, Summer 1994.

W. Warner Moss Prize, Department of Government, College of William and Mary, 1994.

## Achievements in Original Achievement, Investigation, and Research

#### Grants

Development of a Technology for Real-Time Ex Ante Forecasting of Intra and International Conflict and Cooperation with John R. Freeman and Philip A. Schrodt. National Science Foundation, \$601,585 (\$245,320 to UTD), October 2009–September 2012.

Counterterrorism and Terrorism in the Post-9/11 Era with Todd Sandler. Center for Economic and Risk Analysis of Terrorist Events (CREATE), Department of Homeland Security. \$130,000, October 2009—September 2010.

Counterterrorism and Terrorism in the Post-9/11 Era with Todd Sandler. Center for Economic and Risk Analysis of Terrorist Events (CREATE), Department of Homeland Security. \$130,000, October 2008—September 2009.

Bayesian Time Series Models for the Analysis of International Conflict joint with John R. Freeman. National Science Foundation. \$312,334, 2004–2006.

Bayesian Time Series Models in Political Science. Research Initiation Grant, University of North Texas. 2002-2003. \$4,200.

Junior Faculty Summer Research Fellowship. University of North Texas. Summer 2002. \$5,000.

Dynamics of Federal Budgets Under Divided Government. Research Initiation Grant, University of North Texas. 2001-2002. \$3,000.

#### **Books**

Brandt, Patrick T. and John T. Williams. 2007. *Modeling Multiple Time Series*. Thousand Oaks, CA: Sage Publications.

#### Journal Articles – Refereed

Santifort, Charlinda, Todd Sandler and Patrick T. Brandt. 2013. "Terrorist attack and target diversity: Changepoints and their drivers" *Journal of Peace Research*. 50(1): 75–90.

Brandt, Patrick T. and Todd Sandler. 2012. "A Bayesian Poisson Vector Autoregression Model" *Political Analysis*. 20(3): 292–315.

Mason, T. David, Patrick T. Brandt, Mehmet Gurses, and Jason Michael Quinn. 2011. "When Civil Wars Recur: Conditions for Durable Peace After Civil Wars" *International Studies Perspectives*. 12(2): 171–189.

Brandt, Patrick T., John R. Freeman, and Philip A. Schrodt. 2011. "Real Time, Time Series Forecasting of Political Conflict" Conflict Management and Peace Science. 28(1): 41–64.

Sattler, Thomas, Patrick T. Brandt, and John R. Freeman. 2010. "Democratic Accountability in Open Economies" Quarterly Journal of Political Science. 5(1): 71–97.

Brandt, Patrick T. and Todd Sandler. 2010. "What Do Transnational Terrorists Target? Has it Changed? Are We Safer?" *Journal of Conflict Resolution* 54(2): 214–236.

Brandt, Patrick T. and Todd Sandler. 2009. "Hostage Taking: Understanding Terrorism Event Dynamics" *Journal of Policy Modeling*. 31(5): 758–778.

Brandt, Patrick T. and John R. Freeman. 2009. "Modeling Macro Political Dynamics" *Political Analysis*. 17(2): 113–142.

Brandt, Patrick T., T. David Mason, Mehmet Gurses, Nicolai Petrovsky and Dasha Radin. 2008. "When and How the Fighting Stops: Explaining the Duration and Outcome of Civil Wars." *Defence and Peace Economics*. 19(6):415–434.

Sattler, Thomas, John R. Freeman and Patrick T. Brandt. 2008. "Popular Sovereignty and the Room to Maneuver: A Search for a Causal Chain" *Comparative Political Studies*. 41(9): 1212–1239. Erratum. 2009. *Comparative Political Studies*. 42(1): 125–131. Winner of the 2006 Midwest Political Science Association's Robert H. Durr Award for the best paper apply quantitative methods to a substantive problem.

Brandt, Patrick T., Michael P. Colaresi and John R. Freeman. 2008. "The Dynamics of Reciprocity, Accountability and Credibility." *Journal of Conflict Resolution*. 52(3): 343-374.

Brandt, Patrick T. and John R. Freeman. 2006. "Advances in Bayesian Time Series Modeling and the Study of Politics: Theory Testing, Forecasting, and Policy Analysis." *Political Analysis*. 14(1):1–36. Included in the virtual issue, "Bayesian Methods in Political Science" *Political Analysis*, 2012.

Brandt, Patrick T. and John T. Williams. 2001. "A Linear Poisson Autoregressive Model: The Poisson AR(p)" *Political Analysis*. 9(2):164–184.

Brandt, Patrick T., John T. Williams, Benjamin O. Fordham, and Brian Pollins. 2000. "Dynamic Modeling for Persistent Event Count Time Series." *American Journal of Political Science*. 44(4):823–843.

#### Journal Articles / Entries – Non-Refereed

Brandt, Patrick T. 2011. "Granger Causality." *International Encyclopedia of Political Science*. Bertrand Badie, Dirk Berg-Schlosser, and Leonardo Morlino, eds. Sage Publications.

Brandt, Patrick T. 2002. "Using the Right Tools for Time Series Data Analysis" *The Political Methodologist.* 10(2): 22–27.

#### **Invited Talks and Presentations**

Brandt, Patrick T., "A Bayesian Time Series Approach to the Comparison of Conflict Dynamics" School of Politics and Global Studies, Arizona State University, Tempe, AZ, September 28, 2012.

Brandt, Patrck T. "Event Count Time Series Models" Institute of Political Science, Academia Sinica, Taipei, Taiwan, July 12–16, 2010.

Brandt, Patrick T. "Event Count Time Series Models" University of Texas, Austin, February 12, 2010.

Brandt, Patrick T. and John R. Freeman "Multiple Time Series Priors (Or how we learned to stop worrying, and love Bayesian time series)". First St. Louis Area Methods Meeting (SLAMM), Washington University, St. Louis, MO, April 18, 2008.

Sattler, Thomas, Patrick T. Brandt and John R. Freeman. "Economic Policy, Political Accountability and the Room to Maneuver" Sixth Conference on the Political Economy of International Finance (PEIF), Emory University and the Atlanta Federal Reserve Bank's Americas Center, Atlanta, GA, February 2007.

Sattler, Thomas, John R. Freeman, and Patrick T. Brandt. "Popular Sovereignty and the Room to Maneuver: A Search for a Causal Chain", Inaugural meeting of the International Poltical Economy Society (IPES), Princeton University, Princeton, NJ, November 2006 and Konstanz University, Konstanz, Germany, January 2007.

Brandt, Patrick T. "Event Count Time Series Models" Naval Surface Warfare Center, Dahlgren Division, Dahlgren, VA, December 2006.

Brandt, Patrick T. and John R. Freeman. "Bayesian Time Series" Society for Political Methodology, University of California, Davis, CA, July 2006.

Brandt, Patrick T. "Bayesian Multiple Time Series Models" Department of Political Science, Texas A&M University, College Station, TX, March 2006.

Brandt, Patrick T. and John R. Freeman. "Advances in Bayesian Time Series Modeling and The Study of Politics: Theory Testing, Forecasting, and Policy Analysis", Konstanz University, Konstanz, Germany, June 2005.

Brandt, Patrick T. "Modeling Macro Political Dynamics: The Pitfalls of Parsimony" College of William and Mary, October 2005.

Brandt, Patrick T. "Multiple Time Series Models." Two-day workshop on dynamic simultaneous equation, vector autoregression (VAR), and Bayesian VAR models. University of Texas, Dallas, Richardson, TX, October 2004.

Brandt, Patrick T. "Event Count Time Series Models" ITV series with students from the Universities of Minnesota, Illinois, Wisconsin and Ohio State. University of Minnesota, Minneapolis, MN, April 2004

Brandt, Patrick T. "Dynamics of Divided Government" University of Minnesota, Minneapolis, MN, April 2004.

Brandt, Patrick T. and John R. Freeman. "It's a Dynamic Multivariate Uncertain World: Policy Evaluation in Political Science." New Methods Series. University Of Pittsburgh, Pittsburgh, PA, March 2002.

Brandt, Patrick T. and John R. Freeman. "Evaluating International Intermediation: A Bayesian Time Series Approach." New Methods Series. University Of Pittsburgh, Pittsburgh, PA, March 2002.

#### Papers Presented at Professional Meetings and Conferences

Brandt, Patrick T., John R. Freeman, Tse-min Lin, and Phillip A. Schrodt. 2012. "A Bayesian Time Series Approach to the Comparison of Conflict Dynamics" Annual Meeting of te American Political Science Association, New Orleans, LA, August 2012.

Brandt, Patrick T., John R. Freeman, and Philip A. Schrodt. 2011. "Racing Horses: Constructing and Evaluating Forecasts in Political Science" Annual Meeting of the Society for Political Methodology, Princeton University, Princeton, NJ, July 2011. Annual Meeting of the Midwest Political Science Association, Chicago, IL, April 2012.

Brandt, Patrick T. and Jay Ulfelder. 2010. "Economic Growth and Political Instability" Annual Meeting of the American Political Science Assocition, Washington, DC, September 2010.

Brandt, Patrick T. and Todd Sandler. "Complementarity and Substitution in Transnational Terrorist Targeting Decisions" Third Conference on Terrorism and Policy. The University of Texas, Dallas, May 2010.

Brandt, Patrick T. "Empirical evidence for and tests of conflict phases in international and regional conflicts" Midwest Political Science Association, Chicago, IL, April 2010.

Brandt, Patrick T. and Todd Sandler. "What Do Transnational Terrorists Target? Has it Changed? And Are We Safer?" Second Conference on Terrorism and Policy. The University of Texas, Dallas, May 2009.

Brandt, Patrick T. "Empirical, Regime-Specific Models of International, Inter-group Conflict, and Politics." Midwest Political Science Association, Chicago, IL, April 2009.

Brandt, Patrick T., John R. Freeman, and Philip A. Schrodt. "Real Time, Time Series Forecasting of Political Conflict" International Studies Association, New York, NY, February 2009.

Brandt, Patrick T. and Todd Sandler. "Hostage Taking: Understanding Terrorism Event Dynamics" International Studies Association, San Francisco, CA, March 2008.

Brandt, Patrick T. and Justin Appleby. "Conflict Phases and Processes: Bayesian Markov-Switching Models of Endogenous Systems" Midwest Political Science Association, Chicago, IL April 2007.

Sattler, Thomas, John R. Freeman and Patrick T. Brandt. "Popular Sovereignty and the Room to Maneuver: A Search for a Causal Chain" Midwest Political Science Association, Chicago, IL April 2006 and the Inaugural Meeting of the International Political Economy Society, Princeton University, NJ, November 2006. Winner of the 2006 Midwest Political Science Association's Robert H. Durr Award for the best paper applying quantitative methods to a substantive problem.

Brandt, Patrick T. and John R. Freeman. "Modeling Macro Political Dynamics: The Pitfalls of Parsimony" American Political Science Association Meeting, Washington, D.C., September 2005.

Brandt, Patrick T. and John R. Freeman. "Advances in Bayesian Time Series Modeling and the Study of Politics: Theory Testing, Forecasting, and Policy Analysis." Midwest Political Science Association, Chicago, IL, April 2005.

Mason, T. David, Patrick T. Brandt, Mehmet Gurses, Patrick McLeod, Nicolai Petrovsky and Dasha Radin. "Never-Lasting Peace: Explaining the Duration of Civil Wars" International Studies Association, Honolulu, HI, March 2005.

Brandt, Patrick T. and Christina J. Schneider. "What's the Size? Does it have any power? Questions about hypothesis tests in selection models." Midwest Political Science Association, Chicago, IL. April 2004.

Brandt, Patrick T. and John R. Freeman. "Testing Democratic Peace Theory: A New Approach with Application to The Israeli-Palestinian Conflict" International Studies Association, Montreal, Canada, March 2004.

Brandt, Patrick T., John R. Freeman and Tim Hellwig "The Idea of Political-Economic Equilibrium." American Political Science Association, August 2003, Philadelphia, PA.

Brandt, Patrick T. and John R. Freeman. "Bayesian Vector Autoregression Models of International Conflict" Poster presented at the Annual Meeting of the Society for Political Methodology, University of Minnesota, Minneapolis, MN. July 2003.

Brandt, Patrick T. "Dynamics of Divided Government" Midwest Political Science Association. April 2003, Chicago, IL.

Brandt, Patrick T. and John R. Freeman. "Moving Mountains: Bayesian Forecasting As Policy Evaluation." Midwest Political Science Association, April 2002, Chicago, IL.

Brandt, Patrick T. and John R. Freeman. "Evaluating International Mediation: A Bayesian Time Series Approach." Military Conflict and Public Health: Roadmap Conference, Center for Basic Research in the Social Sciences. Harvard University. September 2001.

Brandt, Patrick T. "Specifying and Testing Models of Congressional-Executive Relations." American Political Science Association, Washington D.C., August 2000.

Brandt, Patrick T., John T. Williams and Burt L. Monroe. "Time Series Models for Compositional Data." American Political Science Association, Atlanta, GA, September 1999; Society for Political Methodology, Texas A&M University, July 1999 and the Midwest Political Science Association, April 1999.

### Works in progress

Brandt, Patrick T. "Empirical, Regime-Specific Models of International, Inter-group Conflict, and Politics" In progress.

Brandt, Patrick T. "MSBVAR: Bayesian Vector Autoregression Software for R" Under revision.

#### Software

"PESTS: Poisson Estimators for State-space Time Series." with John T. Williams. 1998. Gauss and R programs for estimating event count time series models. http://www.utdallas.edu/~pbrandt

"MSBVAR: Bayesian estimators and inferences for VAR models", an R package for VAR, BVAR and B-SVAR models. http://yule.utdallas.edu/ Version 0.7, July 2012.

# Professional and University Citizenship

#### Profession activities and committees

Committee Member, 2013, Society for Political Methodology's Software Award Committee.

Associate Editor, Political Analysis. 2013-

Member, Editorial Board, International Interactions. 2011-present.

Member, Editorial Board, Journal of Conflict Resolution. 2010-present.

Committee Member, 2010–2011. Society for Political Methodology's Best Graduate Student Poster Award.

Committee Member, 2010. Midwest Political Science Association's Robert H. Durr Award for the best quantitative methods paper presented at the Midwest Political Science Association Meeting in 2010.

Chair, John T. Williams Dissertation Prize in Political Methodology, Political Methodology Section, American Political Science Association. 2008–2009.

At-Large Council Member, Political Forecasting Group Section, American Political Science Association, 2008–2010.

Committee Member, Gosnell Prize for Excellence in Political Methodology, Political Methodology Section, American Political Science Association. 2007.

Committee Member, John T. Williams Dissertation Prize in Political Methodology, Political Methodology Section, American Political Science Association. 2006.

American Political Science short course, "Event Count Time Series Models," September 1999, Atlanta, Georgia.

Reviewer: American Journal of Agricultural Economics, American Journal of Political Science, American Journal of Sociology, American Mathematical Society / NSA Mathematical Sciences Program, American Political Science Review, American Politics Research, British Journal of Political Science, Cambridge University Press, Chapman & Hall / CRC, Conflict Management and Peace Science, Defence and Peace Economics, Economics and Politics, Foreign Policy Analysis, Greek Ministry of Education, Religious Affairs, Culture and Sport, International Interactions, International Studies Perspectives, International Studies Quarterly, Journal of Conflict Resolution, Journal of Peace Research, Journal of Politics, Journal of Quantitative Criminology, Journal of Spurious Correlation, Journal of Statistical Software, Legislative Studies Quarterly, McGraw-Hill, National Science Foundation, Perspectives on Politics, Political Analysis, Political Behavior, Political Research Quarterly, Quarterly Journal of Political Science, Sage Publications, Social Science Research, Southern Economic Journal, Statistical Methodology.

### School activities and committees

### The University of Texas, Dallas

Member (elected), School of Economic, Political and Policy Science, Peer Review Committee, 2011–2012.

Member, Ad hoc Faculty Committee on Resources and Infrastructure, School of Economic, Political and Policy Sciences, 2010-2011.

Member, Economics faculty search committee, Fall 2008.

Chair, Ad hoc Committee on Quantitative Methods Course Revisions, School of Economic, Political and Policy Sciences, Fall 2008.

Workshop Presenter "Introduction to LATEX", Office of Educational Enhancement, July and September 2008; February and June 2009; January 2010.

Workshop Presenter, "Assessment Methods for Large Classes", Office of Educational Enhancement, Spring 2008.

Member, Political Science Program Committee, 2007-2009, 2010-2012.

Advisor, Pi Sigma Alpha, Political Science Honors Society, Fall 2007-present.

#### University of North Texas

Member, Departmental Executive Committee, 2003-2004.

Graduate Studies and Ad hoc Computing Committees, Department of Political Science, 2001-2004.

Chair, Graduate Studies Committee, Department of Political Science, 2003-2004.

Member, College of Arts and Science Computing Committee. 2001-2004.

Official Representative, Inter-University Consortium for Political and Social Research, 2002-2004.

### Courses and other curricula developed

Undergraduate courses developed: Predicting Political Conflict (Fall 2009).

Graduate courses developed: Decision Theory (Fall 2006), Maximum Likelihood and Bayesian Models (Fall 2007), Advanced Time Series Analysis (Fall 2008), Advanced Regression Analysis for the Social Sciences (Spring 2009), Public Choice (Spring 2013).

Workshop Presentation, "Introduction to LATEX", Office of Educational Enhancement, July and September 2008; February and June 2009; January 2010.

Workshop Presentation, "Assessment Methods for Large Classes", Office of Educational Enhancement, Spring 2008.

#### University activities and committees

#### The University of Texas, Dallas

Chair, Campus Facilities Committee, 2012-2013.

Guest lecturer, UNIV 1010, Fall 2011. "Politics, Math, and Forecasting: Unexpected Places You May Go."

Chair, Information Resources Security, Planning, and Policy Committee (IRSPP), 2011-2012.

Vice Chair, Information Resources Security, Planning, and Policy Committee (IRSPP), 2010-2011.

Member, LMS (Learning Management System) Team / Committee, December 2007-August 2009.

The format of this curriculum vitae is to satisfy the Texas legislature under H.B. 2504, 2009. If you require further information e-mail me at pbrandt@utdallas.edu.