

BRUCE E. HANSEN
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Born: April 18, 1962
Citizenship: U.S.
Personal: Married, two children

Education

1984 A.B. (Economics/Philosophy) Occidental College, Summa Cum Laude
1986 M.A. (Economics) Yale University
1989 Ph.D. (Economics) Yale University

Academic Positions

1989-1992 Assistant Professor, Department of Economics, University of Rochester
1992-1994 Associate Professor, Department of Economics, University of Rochester
1994-1995 Associate Professor, Department of Economics, Boston College
1995-1998 Professor, Department of Economics, Boston College
1998-2008 Professor, Department of Economics, University of Wisconsin
2008- Trygve Haavelmo Professor of Economics, University of Wisconsin

Grants

1991-1992 National Science Foundation Grant SES-9022176
1992-1993 National Science Foundation Grant SES-9120576
1994-1996 Alfred P. Sloan Foundation Research Fellowship
1994-1997 National Science Foundation Grant SBR-9412339
1998-2001 National Science Foundation Grant SBR-9807111
2003-2006 National Science Foundation Grant SBR-0241152
2006-2009 National Science Foundation Grant SES-0550908
2010-2013 National Science Foundation Grant SES-0961258

Editorial & Professional Positions

1995-2008 Co-Editor *Econometric Theory*
1996-2008 Associate Editor *Econometrica*
1992-1995 Associate Editor *Econometric Theory*
2011- Board of Directors National Bureau of Economic Research

Honors and Awards

Fellow, Econometric Society, 2000
Fellow, Journal of Econometrics, 2000
Kellett Mid-Career Award, University of Wisconsin, 2005
WARF Professorship, University of Wisconsin, 2008
Leon Epstein Faculty Fellow Award, University of Wisconsin, 2010-2011

Refereed Publications

- [1] "Estimation and inference in models of cointegration: A simulation study," with P.C.B. Phillips, *Advances in Econometrics* (1990), 8, 225-248.
- [2] "Statistical inference in instrumental variables regression with I(1) processes," with P.C.B. Phillips, *Review of Economic Studies* (1990), 57, 99-125.
- [3] "Strong laws for dependent heterogeneous processes," *Econometric Theory* (1991), 7, 213-221, and "Erratum" (1992), 8, 421-422.
- [4] "GARCH(1,1) processes are near-epoch dependent," *Economic Letters* (1991), 36, 181-186.
- [5] "Efficient estimation and testing of cointegrating vectors in the presence of deterministic trends," *Journal of Econometrics* (1992), 53, 87-121.
- [6] "Testing for parameter instability in linear models," *Journal of Policy Modeling* (1992), 14, 517-533.
- [7] "Heteroskedastic cointegration," *Journal of Econometrics* (1992), 54, 139-158.
- [8] "Tests for parameter instability in regressions with I(1) processes," *Journal of Business and Economic Statistics* (1992), 10, 321-335. Reprinted in Twentieth Anniversary Commemorative Issue of *Journal of Business and Economic Statistics* (2002), 20, 45-59.
- [9] "Convergence to stochastic integrals for dependent heterogeneous processes," *Econometric Theory* (1992), 8, 489-500.
- [10] "The likelihood ratio test under non-standard conditions: Testing the Markov switching model of GNP," *Journal of Applied Econometrics* (1992), 7, S61-S82. Also in *Nonlinear Dynamics, Chaos and Econometrics*, ed. M.H. Pesaran and S.M. Potter (1993), John Wiley & Sons. Also "Erratum", *Journal of Applied Econometrics*, (1996), 11, 195-198.
- [11] "Consistent covariance matrix estimation for dependent heterogeneous processes," *Econometrica* (1992), 60, 967-972.
- [12] "Asymptotic theory for the GARCH(1,1) quasi-maximum likelihood estimator," with Sang-Won Lee, *Econometric Theory* (1994), 10, 29-52.
- [13] "Autoregressive conditional density estimation," *International Economic Review* (1994), 35, 705-730.
- [14] "Are seasonal patterns constant over time? A test for seasonal stability," with Fabio Canova, *Journal of Business and Economic Statistics* (1995), 13, 237-252.
- [15] "Rethinking the univariate approach to unit root tests: How to use covariates to increase power," *Econometric Theory* (1995), 11, 1148-1171.
- [16] "Regression with non-stationary volatility," *Econometrica* (1995), 63, 1113-1132.

- [17] "Residual-based tests for cointegration in models with regime shifts," with Allan Gregory, *Journal of Econometrics* (1996), 70, 99-126.
- [18] "Stochastic equicontinuity for unbounded dependent heterogeneous arrays," *Econometric Theory* (1996), 12, 347-359.
- [19] "Tests for cointegration in models with regime and trend shifts," with Allan Gregory, *Oxford Bulletin of Economics and Statistics*, (1996), 58, 555-560.
- [20] "Inference when a nuisance parameter is not identified under the null hypothesis," *Econometrica* (1996), 64, 413-430.
- [21] "Review article. Methodology: Alchemy or Science?" *The Economic Journal*, (1996), 106, 1398-1413.
- [22] "Approximate asymptotic p-values for structural change tests," *Journal of Business and Economic Statistics* (1997), 15, 60-67.
- [23] "On the issue of functional form choice in hedonic price functions: Further evidence," with John Halstead and Rachel Bouvier, *Environmental Management* (1997), 21, 759-765.
- [24] "Inference in TAR models," *Studies in Nonlinear Dynamics and Econometrics*, (1997), 2.
- [25] "Testing for linearity," *Journal of Economic Surveys* (1999), 13, 551-576.
- [26] "Threshold effects in non-dynamic panels: Estimation, testing, and inference," *Journal of Econometrics* (1999), 93, 345-368.
- [27] "The grid bootstrap and the autoregressive model," *Review of Economics and Statistics* (1999), 81, 594-607.
- [28] "Sample splitting and threshold estimation" *Econometrica* (2000), 68, 575-603.
- [29] "Testing for structural change in conditional models," *Journal of Econometrics* (2000), 97, 93-115.
- [30] "Threshold autoregression with a unit root," with Mehmet Caner, *Econometrica* (2001), 69, 1555-1596.
- [31] "The new econometrics of structural change: dating changes in U.S. Labor Productivity, *Journal of Economic Perspectives*, (2001), 15, 117-128.
- [32] "Testing for two-regime threshold cointegration in vector error-correction models," with Byeongseon Seo, *Journal of Econometrics* (2002), 110, 294-318.
- [33] "Generalized Method of Moments and Macroeconomics," with Kenneth West, *Journal of Business and Economic Statistics* (2002), 20, 460-469.
- [34] "On the Reliability of Recounts from Undervotes: Evidence from the 2000 Presidential Election," *Journal of the American Statistical Association* (2003), 98, 292-298.

- [35] "How responsive are private transfers to income? Evidence from a laissez-faire economy," with Donald Cox and Emmanuel Jimenez, *Journal of Public Economics* (2004), 88, 2193-2219.
- [36] "Instrumental variable estimation of a threshold model," with Mehmet Caner. *Econometric Theory*, (2004), 20, 813-843.
- [37] "Challenges for Econometric Model Selection," *Econometric Theory*, (2005), 21, 60-68.
- [38] "Exact Mean Integrated Squared Error of Higher-Order Kernel Estimators," *Econometric Theory*, (2005), 21, 1031-1057.
- [39] "Interval Forecasts and Parameter Uncertainty," *Journal of Econometrics* (2006), 135, 377-398.
- [40] "Least Squares Model Averaging," *Econometrica*, (2007), 75, 1175-1189.
- [41] "Uniform Convergence Rates for Kernel Estimation with Dependent Data," *Econometric Theory*, (2008), 24, 726-748.
- [42] "Least Squares Forecast Averaging," *Journal of Econometrics*, (2008), 146, 342-350.
- [43] "Averaging Estimators for Regressions with a Possible Structural Break," *Econometric Theory*, (2009), 35, 1498-1514.
- [44] "Averaging Estimators for Autoregressions with a Near Unit Root," *Journal of Econometrics*, (2010), 158, 152-155.
- [45] "Threshold autoregression in economics," *Statistics and Its Interface*, (2011), 4, 123-127.
- [46] "Jackknife model averaging," with Jeffrey Racine, *Journal of Econometrics*, (2012), 167, 38-46.

Textbook

Econometrics

Graduate Textbook (draft)

<http://www.ssc.wisc.edu/~bhansen/econometrics/>

Edited Volume

Econometric Theory and Practice: Frontiers of Analysis and Applied Research, edited by Dean Corbae, Steven N. Durlauf and Bruce E. Hansen. (2006) Cambridge University Press.

Papers in Edited Volumes

"Edgeworth expansions for the Wald and GMM statistics for nonlinear restrictions," (2006) ***Econometric Theory and Practice: Frontiers of Analysis and Applied Research***, edited by Dean Corbae, Steven N. Durlauf and Bruce E. Hansen. Cambridge University Press.

Reviews and Comments

- [1] "Discussion of 'Data Mining Reconsidered' by Kevin Hoover and Stephen Perez," *Econometrics Journal* (1999), 2, 192-201.
- [2] "Book Review: *Handbook of Econometrics*, Volume 4," with Joel Horowitz, *Econometric Theory* (1997), 13, 119-132.
- [3] "Book Review: *Time Series Analysis* by James D. Hamilton," *Econometric Theory* (1995), 11, 625-631.
- [4] Comment on "Testing for common features" by R. Engle and S. Kozicki, *Journal of Business and Economic Statistics* (1993), p. 385-386.
- [5] Comment on "Further evidence on business cycle duration dependence" by F.X. Diebold, G.D. Rudebusch and D.E. Sichel, *Business Cycles, Indicators, and Forecasting*, ed. J.H. Stock and M.W. Watson (1993), p. 280-284.
- [6] Comment on "Feature Matching in Time Series Modeling" by Yingcun Xia and Howell Tong, *Statistical Science*, (2011), 26, 47-48.

Special Courses

December 1996

Workshop of the Netherlands Network of Economics, Maastricht, Netherlands
"The Econometrics of Structural Change"
5-day course for graduate students

June 2004

Centro Interuniversitario di Econometria (CIDE) Summer School, Bertinoro, Italy
"Structural Change and Threshold Models"
5-day course for graduate students

August 2010

International Monetary Fund
"Forecast Combination"
1-day course for IMF Staff

November 2010

UC Riverside
Distinguished visitor

September 2011

Boston University
Distinguished visitor
5-day course for graduate students

October 2011

International Monetary Fund
"Forecasting"
3-day course for IMF Staff

July 2012 (scheduled)

Advanced Summer School in Economics and Econometrics
"Time Series and Forecasting"
University of Crete

Conference Presentations

- 1987 Econometric Society Summer Meetings
- 1990 ENSAE Conference on ARCH Models (Paris)
World Congress of the Econometric society, Barcelona
Canadian Econometric Study Group
Econometric Society Winter Meetings
- 1991 Conference on Nonlinear Dynamics and Econometrics, UCLA
NBER conference on "Business cycles, leading indicators and forecasting"
Econometric Society Summer Meetings
- 1992 Econometric Society Winter Meetings
Yale Conference on Bayes Methods and Unit Roots
Yale Conference on Empirical processes and dependent random variables
Recent Developments in the Econometrics of Structural Change (University of Montreal)
- 1993 Econometric Society Winter Meetings
Yale/NSF Conference on Multiple Trending Time Series
EC² Conference (Oxford University)
- 1994 Econometric Society Winter Meetings
- 1996 Econometric Society Winter Meetings
Society for Nonlinear Dynamics and Econometrics
NBER Summer Institute – Forecasting Workshop
Canadian Econometric Study Group
Bergamo Conference on Applied Economics
NBER/NSF Time Series Conference (Rotterdam)
- 1997 Econometric Society Winter Meetings
- 1998 Econometric Society Winter Meeting
NBER Summer Institute – Forecasting Workshop
Mid-West Econometrics Group
- 1999 Econometric Society Winter Meeting
Econometric Society Summer Meeting
Econometric Society Latin American Meeting
Cowles Econometrics Conference
- 2000 Econometric Society Winter Meeting
Cardiff conference on long memory and nonlinear time series
ESRC Econometric Study Group Conference, Bristol
World Congress of the Econometric society, Seattle
- 2001 Joint Statistical Meetings
Econometric Society European Meeting
Exchange Rate conference (UW Madison)
- 2003 Econometric Society Winter Meeting
North Triangle Econometrics Conference (keynote speaker)
- 2004 Econometric Society Winter Meeting
Retirement Conference for Clive Granger (UCSD)
Texas Camp Econometrics (keynote speaker)
Joint Statistical Meetings
- 2005 Canadian Econometrics Study Group (keynote speaker)
- 2006 Econometrics in Rio (keynote speaker)
Midwest Econometrics Group (keynote speaker)
New York Area Econometrics conference

- 2007 20 Years of Cointegration, Tinbergen Institute (keynote speaker)
NBER-NSF Time Series Conference
Conference in Honor of Paul Newbold, University of Nottingham (keynote speaker)
EC²: Recent Advances in Econometric Time Series (Faro, Portugal) (keynote speaker)
- 2008 London Time Series Workshop (keynote speaker)
Dutch Econometrics Study Group (keynote speaker)
UK Econometrics Study Group (keynote speaker)
- 2009 CIREQ Time Series Conference (Montreal)
- 2010 World Congress of the Econometric society, Shanghai
Midwest Econometrics Group
CIREQ Time Series Conference (Montreal)
- 2011 Yale Economics Alumni Conference
Econometric Society Summer Meeting
Econometric Society Australasian Meeting (keynote speaker)
Joint Statistical Meetings
Info Metrics Workshop on Shrinkage at American University
- 2012 CIREQ conference on High Dimensional Problems in Econometrics (scheduled)
Vienna conference on statistical inference in complex/high-dimensional problems (scheduled)

Seminar Presentations

- 1989 Queen's University
University of Rochester
- 1990 Indiana University
UCLA
Yale University
- 1991 University of Pennsylvania
Northwestern University
Oxford University
University of Alberta
University of Saskatchewan
University of Wisconsin – Madison
University of Iowa
UCLA
MIT
- 1992 UCSD
John Hopkins University
University of Michigan
McGill University
University of Montreal
Queen's University
Princeton University
University of Illinois
Northwestern University

Cornell University
1993 Washington University, Finance Department
Columbia University
Syracuse University
University of Texas – Austin
Rice University
Erasmus University
1994 UCLA
USC
UC Irvine
Cal Tech
Penn State University
Ohio State University
Boston College
Board of Governors, Federal Reserve System
Harvard University
1995 Yale University
Texas A&M University
Southern Methodist University
1996 Cornell University
Brown University
SUNY Albany
University of New Hampshire
University of Rochester
University of Michigan
Michigan State University
Tilburg University
1997 University of Maryland
M.I.T.
Northwestern University
University of Chicago
New York Federal Reserve Bank
University of Guelph
Princeton University
University of Wisconsin, Madison
University of Pennsylvania
University of Michigan
1998 Duke University
Harvard University
New York University
University of Kansas
St. Louis Federal Reserve Board
University of Southern California/UCLA
University of Illinois, Urbana-Champaign
University of Iowa
1999 Board of Governors (Visiting Scholar, Two presentations)
Northern Illinois State University
Northwestern University
Iowa State University

UW Chaos and Complexity Seminar

2000 University of Virginia
University of Montreal

2001 University of Pittsburgh

2004 Southern Methodist University
Princeton University
University of Chicago GSB
Ohio State University
University of Rochester
UC Riverside
UCSD
Stanford
UCLA

2005 Harvard University

2006 Duke University
McMaster University
Texas A&M University
New York University

2007 University of Pittsburgh
Columbia University

2008 University of British Columbia
Queen's University
University of Montreal
Indiana University
Yale University
Michigan State University

2009 NYU Stern School, Statistics Department
University of Southern California
Carnegie Mellon University, Statistics Department
Brown University
Purdue University
Northwestern University

2010 UC Riverside
UW Madison, Statistics Department

2011 ITAM (Mexico)
University of Pennsylvania
Boston University
Penn State University
Queen's University
University of Michigan

2012 UW Milwaukee (scheduled)
Rice University (scheduled)
MIT/Harvard (scheduled)