Michael B. Gordy

Contact Information

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Current Position

Senior Economist, Board of Governors of the Federal Reserve System, 1994–Present

Visiting Scholar, Indian School of Business, 2006

Education

Ph.D., Economics, Massachusetts Institute of Technology, 1994

B.A. (summa cum laude), Mathematics & Philosophy, Yale University, 1985

Honors and Awards

Quant of the Year 2004, Risk Magazine

Financial Risk Manager of the Year 2003, Global Association of Risk Professionals (GARP)

Best Paper Prize for Volume XII, Journal of Financial Intermediation

Most cited author in 2003, Risk Magazine

Editorial Activities

Associate Editor, *Journal of Banking & Finance*, 2002–Present

Associate Editor, *Journal of Credit Risk*, 2004–Present

Associate Editor, *International Journal of Central Banking*, 2004–Present

Member of Editorial Board, *GARP Digital Library*, 2005–Present

International Advisory Board, Institute of Global Finance, Australian School of Business, 2011–Present

Referee for *American Economic Review*; *Annals of Operations Research*; *Communications in Statistics – Simulation & Computation*; *Journal of Banking & Finance*; *Journal of Computational Finance*; *Journal of Credit Risk*; *Journal of Economic Dynamics & Control*; *Journal of Economics & Business*; *Journal of Empirical Finance*; *Journal of Finance*; *Journal of Financial Intermediation*; *Journal of Money, Credit & Banking*; *Journal of Risk*; *Journal of the American Statistical Association*; *International Journal of Central Banking*; *Management Science*; *Quarterly Journal of Economics*; *Quantitative Finance*; *Review of Economics & Statistics*; *Review of Finance*; *Review of Financial Studies*; *Risk*; *Stochastic Systems*

Publications: Journal Articles

"Granularity Adjustment for Mark-to-Market Credit Risk Models," *Journal of Banking and Finance*, forthcoming (with James Marrone).

"Constant Proportion Debt Obligations: A Post-Mortem Analysis of Rating Models," *Management Science*, 58(3), March 2012 (with Søren Willemann).

"Nested Simulation in Portfolio Risk Measurement," *Management Science*, 56(10), October 2010 (with Sandeep Juneja).

"A Note on Turán Type and Mean Inequalities for the Kummer Function," *Journal of Mathematical Analysis and Applications*, 349(1), January 2009 (with Roger W. Barnard and Kendall C. Richards).

"Procyclicality in Basel II: Can We Treat the Disease Without Killing the Patient?," *Journal of Financial Intermediation* 15(3), July 2006 (with Brad Howells).

"Switching Costs and Adverse Selection in the Market for Credit Cards: New Evidence," *Journal of Banking and Finance* 30(6), June 2006 (with Paul Calem and Loretta Mester).

"A Risk-Factor Model Foundation for Ratings-Based Bank Capital Rules," *Journal of Financial Intermediation* 12(3), July 2003. Reprinted in *Economic Capital: A Practitioner Guide* (Ashish Dev, Ed.), Risk Books, 2004.

"Random Tranches," *Risk* 16(3), March 2003 (with David Jones). Reprinted in *Theory and Practice of Credit Risk Modelling* (Alexander Lipton, Ed.), Risk Books, 2008.

"Saddlepoint Approximation of CreditRisk+," *Journal of Banking and Finance* 26(7), July 2002.

"A Comparative Anatomy of Credit Risk Models," *Journal of Banking and Finance* 24(1/2), January 2000. Reprinted in *Model Risk: Concepts, Calibration and Pricing* (Rajna Gibson, Ed.), Risk Books, 2003.

"Hedging Winner's Curse with Multiple Bids: Evidence from the Portuguese Treasury Bill Auction," *Review of Economics and Statistics* 81(3), August 1999.

"Computationally Convenient Distributional Assumptions for Common-Value Auctions," *Computational Economics* 12(1), August 1998.

PUBLICATIONS: BOOKS

Credit Risk Modelling: The Cutting-edge Collection (Editor), Risk Books, London, 2003

PUBLICATIONS: BOOK CHAPTERS

"Small-sample estimation of models of portfolio credit risk" in *Recent Advance in Financial Engineering: The Proceedings of the KIER-TMU International Workshop on Financial Engineering 2009*, (M. Kijima, C. Hara, K. Tanaka and Y. Muromachi, Eds.), World Scientific Publishing, 2010 (with Erik Heitfield).

"Risk-Based Regulatory Capital and Basel II" in *Oxford Handbook of Banking* (Allen Berger, Phil Molyneux and John O.S. Wilson, Eds.), Oxford University Press, 2010 (with Erik Heitfield).

"Nested simulation" in *Encyclopedia of Quantitative Finance*, Wiley, 2010 (with Sandeep Juneja).

Preface, *Pillar II in the New Basel Accord: The Challenge of Economic Capital* (Andrea Resti, Ed.), Risk Books, 2008.

"The Bank as Grim Reaper: Debt Composition and Recoveries on Defaulted Debt" in *Proceedings of the 43rd Annual Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, 2007 (with Mark Carey).

"Efficient Simulation for Risk Measurement in a Portfolio of CDOs" in *Proceedings of the 2006 Winter Simulation Conference*, 2006 (with Sandeep Juneja).

"Model Foundations for the Supervisory Formula Approach" in *Structured Credit Products: Pricing, Rating, Risk Management and Basel II* (William Perraudin, Ed.), Risk Books, 2004.

"Saddlepoint Approximation" in *CreditRisk+ in the Banking Industry* (V.M. Gundlach and F.B. Lehrbass, Eds.), Springer, 2004.

"Granularity Adjustment in Portfolio Credit Risk Measurement," in *Risk Measures for the 21st Century* (Giorgio P. Szegö, Ed.), Wiley, 2004.

"What Wags the Tail? Identifying the Key Assumptions in Models of Portfolio Credit Risk," in *Mastering Risk: Volume 2 'Applications'* (Carol Alexander, Ed.), FT–Prentice Hall, 2001.

"Credit VaR Models and Risk-Bucket Capital Rules: A Reconciliation," *Proceedings of the 36th Annual Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, 2000.

Working Papers

"On the distribution of a discrete sample path of a square-root diffusion," Federal Reserve Board FEDS 2012-12, 2012.

"Granularity adjustment for Basel II," 2012 (with Eva Lütkebohmert). Update of Deutsche Bundesbank Discussion Paper Series 2, No. 01/2007.

"The Bank as Grim Reaper: Debt Composition and Recoveries on Defaulted Debt," 2007 (with Mark Carey).

"Measuring Systematic Risk in Recoveries on Defaulted Debt: Firm-Level Ultimate LGDs," 2004 (with Mark Carey).

"A Generalization of Generalized Beta Distributions," Federal Reserve Board FEDS 1998-18, 1998.

Conference Committees

Conference on Regulation of Systemic Risk, Federal Reserve Board, Washington, September 2011.

Systemic Risk, Session at Third SIAM Conference on Financial Mathematics & Engineering, San Francisco, November 2010.

Forum on Systemic Risk and Liquidity, Fields Institute, Toronto, May 2010.

CAF Summer Research Conference, Hyderabad, India, August 2006.

Risk Magazine's Quant Congress, 2006.

Concentration Risk in Credit Portfolios, Frankfurt, Germany, November 2005.

C.R.E.D.I.T. 2004: Validation of Credit Risk Models, Venice, Italy, September 2004.

HEC Montréal Second International Conference on Credit Risk, Montreal, Canada, April 2004.

Seminars

Office of the Comptroller of the Currency, Washington DC, 2012.

Georgia State University, Atlanta, 2010.

Indian School of Business, Hyderabad, 2010.

Northwestern University (McCormick School), Evanston, 2009.

Magyar Nemzeti Bank, Budapest, 2008.

Queen's University School of Business, Kingston (Ontario), 2008.

Fields Institute of the University of Toronto, Toronto, 2008.

Bank for International Settlements, Basel, 2008.

National University of Singapore, Singapore, 2008.

Stanford GSB, Palo Alto, 2007.

Georgia Tech, Atlanta, 2007.

Deutsche Bundesbank, Frankfurt, 2006.

Monetary Authority of Singapore, Singapore, 2006.

European Central Bank, Frankfurt, 2004.

Deutsche Bundesbank, Frankfurt, 2003.

FDIC, Washington DC, 2003.

Federal Reserve Bank of New York, New York, 2002.

Banca d'Italia, Rome, 2001.

Fondo Interbancario di Tutela dei Depositi, Milan, 2001.

Banque de France, Paris, 2000.

Ohio State University, Columbus, 1997.

FDIC, Washington DC, 1996.

Conference Presentations: Academic

Mathematics of the New Financial Systems, University of Minnesota, May 2012.

R/Finance 2012, University of Illinois at Chicago, May 2012.

Conference on Liquidity and Credit Risk, Universität Freiburg, March 2012.

McGill University 4th Risk Management Conference, Mont Tremblant, March 2012.

Measuring Risk, Princeton University, October 2011.

CRC Credit Scoring Conference, University of Edinburgh, August 2011.

Third SIAM Conference on Financial Mathematics & Engineering, San Francisco, November 2010.

Forum on Systemic Risk and Liquidity, Fields Institute, Toronto, May 2010.

CREST Workshop on Large Portfolio, Concentration and Granularity, Paris, March 2010.

McGill University 3rd Risk Management Conference, Mont Tremblant, March 2010.

16th Annual Workshop on Derivative Securities & Risk Management, Center for Applied Probability, Columbia University, New York, November 2009.

Collegium Budapest International Workshop on Financial Risk, Market Complexity and Regulation, Budapest, October 2009.

KIER-TMU International Workshop on Financial Engineering, Tokyo, August 2009.

MITACS Economic Summit on Systemic Risk, Toronto, April 2009.

American Mathematical Society Annual Meeting, Washington DC, January 2009.

Second Annual Risk Management Conference, Risk Management Institute, National University of Singapore, Singapore, July 2008.

Caesarea Center 5th Annual Conference, Herzliya, Israel, May 2008.

18th Annual Derivatives Securities & Risk Management Conference, Arlington, Virginia, April 2008.

Financial Risks: New Developments in Structured Products & Credit Derivatives, Paris, March 2008 (plenary address).

Conference on Credit Risk, Stevanovich Center for Financial Mathematics at the University of Chicago, Chicago, October 2007.

13th International Conference on Computing in Economics and Finance, Society for Computational Economics, Montreal, June 2007.

HEC Montréal Third International Conference on Credit and Operational Risks (keynote address), Montreal, April 2007.

Credit Risk and Credit Derivatives Conference, Federal Reserve Board, Washington DC, March 2007.

Operations Research 2006, Universität Karlsruhe, Germany, September 2006.

Quantitative Finance Conference on Credit Risk, University of Western Ontario, London (Ontario), November 2005.

Recent Advances in Credit Risk Research, London Business School, London, May 2005.

Workshop on Banking and Financial Stability, Vienna, Austria, April 2005.

15th Annual Derivatives Securities & Risk Management Conference, Arlington, Virginia, April 2005.

Conference on Prudential Regulation and Banking Supervision, Madrid, Spain, November 2004.

C.R.E.D.I.T. 2004: Validation of Credit Risk Models, Venice, Italy, September 2004.

Mathematics of Credit Risk, Princeton University, September 2004.

Recent Advances in Credit Risk Research, NYU Stern, New York, May 2004.

Accounting, Transparency and Bank Stability, BIS Workshop, Basel, Switzerland, May 2004.

HEC Montréal International Conference on Credit Risk (keynote address), Montreal, April 2002.

Statistical and Computational Problems in Risk Management: VaR and beyond VaR, Università di Roma "La Sapienza," Rome, June 2001.

Conference on Credit Risk, University of Waterloo, Toronto, May 2001.

Measurement of Risks in Financial Markets, NBER, Cambridge, September 2000.

Seventh Annual Conference of the Chinese Finance Association, University of Maryland College Park, August 2000.

Bank Structure Conference, Federal Reserve Bank of Chicago, Chicago, May 2000.

Credit Risk Modelling and the Regulatory Implications, Bank of England, London, September 1998.

Third International Conference on Computing in Economics and Finance, Society for Computational Economics, Stanford University, July 1997.

Annual Meetings of the Econometrics Society, New Orleans, January 1997.

Annual Meetings of the Financial Management Association, New Orleans, October 1996.

Second International Conference on Computing in Economics and Finance, Society for Computational Economics, Geneva, June 1996.

Conference Presentations: Practitioner

Global Derivatives USA, Chicago, November 2011.

GARP Annual Convention, New York, February 2009.

Procyclicality in the Financial System, De Nederlandsche Bank, Amsterdam, Febuary 2009.

Workshop on the Potential Procyclicality of the New Regulatory Framework, European Central Bank, Frankfurt, September 2008.

RiskLab-Madrid Meeting on Financial Risks, Madrid, February 2008.

ICBI RiskMinds, Geneva, December 2007.

Credit Risk Summit, London, June 2007.

GARP Annual Convention, New York, February 2007.

Credit Risk Asia 2006 (plenary address), Singapore, June 2006.

Risk 2005 USA, Boston, June 2005.

GARP Annual Convention (keynote address), New York, February 2005.

ICBI Risk Management, Geneva, December 2004.

Credit Risk Summit USA, New York, October 2004.

GARP Credit and Counterparty Risk Summit (keynote address), New York, June 2004.

GARP Annual Convention (keynote address), New York, February 2004.

ICBI Risk Management, Geneva, December 2003.

Capital Allocation 2003 USA, New York, September 2003.

Investing in CDOs 2003 (keynote address), New York, June 2003.

Credit Risk Summit USA (keynote address), New York, October 2002.

Risk 2002 USA, Boston, June 2002.

ICBI Credit, Counterparty and Default Risk Forum 2000, Paris, September 2000.

ICBI Risk Management, Geneva, November 1999.

ICM Conference on Managing Economic and Regulatory Capital, New York, June 1999.

Workshops and Guest Lectures

Imperfect Diversification: Granularity Adjustment in Risk Management, Financial Econometrics and Simulation Methods, KIER-TMU Lectures on Financial Engineering, Tokyo, July 2009.

Basel II and Credit Risk Management, Reserve Bank of India, Goa, September 2007.

Foundations of Basel II, Reserve Bank of India, Mumbai, December 2006.

Portfolio Credit Risk and Basel II, Institute for Financial Management and Research, Chennai, August 2006.

Leadership and Customer Focus, Indian School of Business, Hyderabad, January 2006.

Credit Risk Management: Techniques and Applications, World Bank, Washington DC, October 2005.

Policies for Monetary and Financial Stability, International Monetary Fund, Washington DC, July 2003.

Economic Capital: A Cross-Institutional Perspective, Federal Reserve Bank of New York, New York, January 2002.

Assessments of Economic Capital, Federal Reserve Bank of New York, New York, April 2001.

Advanced Techniques for Modelling Credit Risk, Risk Seminars, New York, February 2000.