Michael B. Gordy

Contact Information

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Employment

Chief, Risk Analysis Section, Division of Research & Statistics, Board of Governors of the Federal Reserve System, 2020–Present

Principal Economist, Board of Governors of the Federal Reserve System, 2015–2020

Senior Economist, Board of Governors of the Federal Reserve System, 2002–2015

Visiting Faculty, Princeton University, 2014

Visiting Scholar, Indian School of Business, 2006

Economist, Board of Governors of the Federal Reserve System, 1994–2002

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

Guest Editor, special issue on "The Impact of Global Pandemic on Financial Markets and Institutions," *Journal of Banking & Finance* 147, February 2023

Associate Editor, *Journal of Banking & Finance*, 2002–2020

Co-Editor-in-Chief, *Journal of Credit Risk*, 2016–2020

Associate Editor, *Journal of Credit Risk*, 2004–2015

Associate Editor, *International Journal of Central Banking*, 2004–2023

Guest Editor, special issues on "Systemic Risk: Data, Models and Metrics," *Statistics & Risk Modeling*, December 2016 and September 2017

Editorial Board, *Global Credit Review*, 2012–2016

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

Publications: Journal Articles

"Counterparty Risk and Counterparty Choice in the Credit Default Swap Market" (with Wenxin Du, Salil Gadgil and Clara Vega), *Management Science* 70(6), June 2024.

"The Bank as Grim Reaper: Debt Composition and Bankruptcy Thresholds" (with Mark Carey), *Journal of Financial Economics* 142(3), December 2021.

"Spectral Backtests of Forecast Distributions with Application to Risk Management" (with Alexander McNeil), *Journal of Banking and Finance* 116, July 2020.

"Expectations of Functions of Stochastic Time with Application to Credit Risk Modeling" (with Ovidiu Costin, Min Huang and Pawel Szerszen), *Mathematical Finance* 26(4), October 2016.

"Finite-dimensional Distributions of a Square-root Diffusion," *Journal of Applied Probability* 51(4), December 2014.

"Granularity Adjustment for Regulatory Capital Assessment" (with Eva Lütkebohmert), *International Journal of Central Banking* 9(3), September 2013.

"Granularity Adjustment for Mark-to-Market Credit Risk Models" (with James Marrone), *Journal of Banking and Finance* 36(7), July 2012.

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

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

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

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

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

"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" (with David Jones), *Risk* 16(3), March 2003. Revised version in *Quant of the Year, 2000–2014* (Alexander Lipton, Ed.), Risk Books, 2014.

"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

"Risk-Based Regulatory Capital and the Basel Accords" (with Erik Heitfield and Jason Wu) in *Oxford Handbook of Banking*, Second Edition (Allen Berger, Phil Molyneux and John O.S. Wilson, Eds.), Oxford University Press, 2015.

"Small-sample Estimation of Models of Portfolio Credit Risk" (with Erik Heitfield) 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.

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

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" (with Mark Carey) in *Proceedings of the 43rd Annual Conference on Bank Structure and Competition*, Federal Reserve Bank of Chicago, 2007.

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

"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

"Bayesian Estimation of Time-Changed Default Intensity Models" (with Pawel Szerszen), Federal Reserve Board FEDS 2015-002, 2015.

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

Conference Committees

GARP Annual Convention, New York, March 2020.

Conference on the Interconnectedness of Financial Systems, Federal Reserve Board, Washington DC, March 2019.

Monitoring Systemic Risk: Data, Models and Metrics, Isaac Newton Institute for Mathematical Sciences, Cambridge University, September 2014.

Conference on Regulation of Systemic Risk, Federal Reserve Board, Washington DC, 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, August 2006.

Risk Magazine's Quant Congress, 2006.

Concentration Risk in Credit Portfolios, Frankfurt, November 2005.

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

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

Teaching: Courses

Credit Risk Modeling, CEMFI Summer School, Madrid, August 2017 and September 2014.

Financial Crises, CEMFI Summer School, Madrid, September 2015.

Financial Crises, Princeton University, Spring 2014.

Options, Futures and Financial Derivatives, Princeton University, Spring 2014.

Mathematics for Economists, MIT, Fall 1993.

Teaching: Workshops

Modeling and Management of Corporate Credit Risk, Scottish Financial Risk Academy, Edinburgh, April 2015.

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.

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.