

## Mark Schroder

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### Education

- Ph.D., finance, 1995, Kellogg Graduate School of Management, Northwestern U.
- MBA, concentration in finance, 1983, University of Chicago Graduate School of Business.
- M.Sc., economic theory, 1981, London School of Economics and Political Science.
- B.A., economics, 1980, Saint Lawrence University.

### Experience

- Professor, Eli Broad Graduate School of Management, July 2008-present.
- Associate professor, Eli Broad Graduate School of Management, 2001-2008.
- Assistant professor, Eli Broad Graduate School of Management, 1998-2001.
- Assistant professor, State University of New York at Buffalo, 1994-1998.
- Nationsbanc-CRT, 1993-1994.
- Chicago Board of Trade Clearing Corporation (part time), 1990-1993.
- Kidder-Peabody & Company, 1988-1989.
- Prudential-Bache Securities, 1986-1988.
- Chicago Board of Trade, 1984-1986
- CBS Records, 1983-1984

### Publications

- “Optimal debt contracts and product market competition with replacement,” (with Naveen Khanna), *Journal of Economic Theory*, 145 (January 2010) 156–188.
- “Recursive Utility,” *Encyclopedia of Quantitative Finance*, edited by Rama Cont, John Wiley & Sons, 2010.
- “Optimality and State Pricing in Constrained Financial Markets with Recursive Utility under Continuous and Discontinuous Information,” (with Costis Skiadas), *Mathematical Finance*, v. 18, no. 2 (April 2008), 199-238 (lead article).

- “Lifetime Consumption-Portfolio Choice under Trading Constraints, Recursive Preferences, and Nontradeable Income,” (with Costis Skiadas), *Stochastic Processes and Their Applications*, v. 115, no. 1 (January 2005), 1-30 (lead article).
- “Risk-Neutral Parameter Shifts and Derivatives Pricing in Discrete Time,” *Journal of Finance*, v.59, no. 5 (October 2004), 2375-2401.
- “Optimal Lifetime Consumption-Portfolio Strategies under Trading Constraints and Generalized Recursive Preferences,” (with Costis Skiadas), *Stochastic Processes and Their Applications*, v. 108, no. 2 (December 2003), 155-202 (lead article).
- “An Isomorphism between Asset Pricing Models with and without Linear Habit Formation” (with Costis Skiadas), *Review of Financial Studies*, v. 14, no. 4 (Fall 2002), 1189-1221, Barclays Global Investors/Michael Brennan Runner-Up Award for best paper.
- “Changes of Numeraire for Pricing Futures, Forwards and Options,” *Review of Financial Studies*, v. 12, no. 5 (Winter 1999), 1143-1163.
- “Optimal Consumption and Portfolio Selection with Stochastic Differential Utility” (with Costis Skiadas), *Journal of Economic Theory*, v. 89, no. 1 (November 1999), 68-126.
- “A Parity Result for American Options” (with Robert McDonald), *Journal of Computational Finance*, v. 1, no. 3 (Spring 1998), 5-13 (lead article).
- “A Term Structure Model with Preferences for the Timing of Resolution of Uncertainty” (with Darrell Duffie and Costis Skiadas), *Economic Theory*, v. 9 (January 1997), 3-22 (lead article).
- “Recursive Valuation of Defaultable Securities and the Timing of Resolution of Uncertainty” (with Darrell Duffie and Costis Skiadas), *Annals of Applied Probability*, v. 6, no. 4 (November 1996), 1075-1090.
- “A Reduction Method Applicable to Compound Option Formulas,” *Management Science*, v. 35 (July 1989), 823-827.
- “Computing the Constant Elasticity of Variance Option Pricing Formula,” *Journal of Finance*, v. 44 (March 1989), 211-219.
- “Adapting the Binomial Model to Value Options on Assets with Fixed-Cash Payouts,” *Financial Analysts Journal*, v. 44 (November/December 1988), 54-62.

## Work in Progress

- “Monotonicity of the Stochastic Discount Factor and Expected Option Returns,” with Ranadeb Chaudhuri (revise and resubmit, *Review of Financial Studies*).
- “Functional Ito’s Lemma,” with Sumit Sinha and Shlomo Levental.
- “The Continuous-Time Principal-Agent Problem with Moral Hazard and Recursive Preferences,” with Sumit Sinha and Shlomo Levental (under review).
- “Linked Recursive Preferences and Optimality,” with Sumit Sinha and Shlomo Levental (under review). “Optimal Contracting and Nash Equilibria in the Continuous-Time Principal-Agent problem with Multiple Principals,” with Lening Kang and Shlomo Levental

- “Optimal Contracting and Nash Equilibria in the Continuous-Time Principal-Agent problem with Multiple Principals,” with Lening Kang and Shlomo Levental.
- “The Continuous-Time Principal-Agent Problem with Constrained Trading,” with Zsuzsanna Fluck.
- “Entrepreneurship and Innovation,” with Zsuzsanna Fluck.
- “Estimating the Pricing Kernel from Option Prices,” with Ranadeb Chaudhuri.
- “A Maximum Principle for Multidimensional BSDEs,” with Sumit Sinha and Shlomo Levental

### **Working Papers**

- “Optimal Portfolio Selection with Proportional and Fixed Transaction Costs,” August 1998.
- “Optimal Portfolio Selection with Fixed Transaction Costs: Numerical Solutions,” December 1995.
- “Survivorship Bias.”

### **Professional Activities**

- Associate editor for the *Review of Financial Studies*, 2001-2004
- Ad hoc refereeing for *American Economic Review*, *Annals of Operations Research*, *Decisions in Economics and Finance*, *Decision Sciences*, *Econometrica*, *Economic Theory*, *Journal of Finance*, *Journal of Economic Dynamics and Control*, *Journal of Economic Theory*, *Journal of Financial Economics*, *Journal of Financial and Quantitative Analysis*, *Journal of Futures Markets*, *Journal of International Money and Finance*, *Journal of Mathematical Economics*, *Mathematics and Financial Economics*, *Mathematical Finance*, *Mathematics of Operations Research*, *Operations Research*, *Pacific-Basin Finance Journal*, *Quantitative Finance*, *Review of Financial Economics*, *Review of Financial Studies*, *Review of Quantitative Finance and Accounting*, *Statistics & Probability Letters*.
- Chair of “International Finance” session at 2012 WFA meetings.
- Discussant at the 2012 ASSA meetings.
- Invited speaker for Frontiers of Finance 2011 “Recent Advances in Finance” conference (Warwick Business School).
- Presented “Monotonicity of the Stochastic Discount Factor and Expected Option Returns” at the 2010 WFA meetings.
- “The Continuous-Time Principal-Agent Problem with Moral Hazard and Recursive Preferences,” presented at the Bachelier Finance Society World Congress 2010.
- “Optimal Contracting and Nash Equilibria in the Continuous-Time Principal-Agent problem with Multiple Principles” presented at the Bachelier Finance Society World Congress 2010.
- Presented “Monotonicity of the Stochastic Discount Factor and Expected Option Returns” at Nanyang Business School, 2009, and Stockholm School of Economics, 2010.

- Presented “Optimal debt contracts and product market competition with replacement” at University of Texas at Austin IROM.
- Discussant at WFA 2009 meetings.
- Invited speaker to present “Optimality and State Pricing in Constrained Financial Markets with Recursive Utility under Continuous and Discontinuous Information,” for “Advances in Portfolio Decision Making” conference, June 2007.
- Presented “Volatility-Invariant Option Contracts.” at National City Corporation, December 2006.
- Presented “Lifetime Consumption-Portfolio Choice under Trading Constraints, Recursive Preferences, and Nontradeable Income” at the 2004 Western Finance Meetings.
- “Optimal Lifetime Consumption-Portfolio Strategies under Trading Constraints and Generalized Recursive Preferences” presented at the 2003 Western Finance Meetings (by Skiadas), 2003 Midwest Finance Conference (by Schroder), at Carnegie Mellon University (by Schroder), 2003, and the 2003 North American Summer Meeting of the Econometric Society (by Schroder).
- Presented “Optimal Lifetime Consumption-Portfolio Strategies in Incomplete Markets under Homothetic Recursive Preferences” at the American Mathematical Society Sectional Meeting in Ann Arbor, March 2002, and at the Bachelier Finance Society 2<sup>nd</sup> World Congress in Crete, June 2002.
- Presented “Risk-Neutral Parameter Shifts and Derivatives Pricing in Discrete Time” at Washington University, 2001.
- Discussant for “Survival Bias and the Equity Premium Puzzle,” 11<sup>th</sup> Annual Financial Economics and Accounting Conference, November 2000.
- Presented “An Isomorphism between Asset Pricing Models with and without Linear Habit Formation” at the Western Finance Association 35<sup>th</sup> Annual Conference, June 2000.
- Discussant for “Nonlinear taxation, tax arbitrage, and equilibrium asset prices,” Western Finance Association, 34<sup>th</sup> Annual Conference, June 1999.
- Discussant for “The Valuation of Interest Rate Derivatives in a Multi-Factor Cox-Ingersoll-Ross Model That Matches the Initial Term Structure,” Eighth Annual Conference on Financial Economics and Accounting, November 1997.
- Presented “Computing Parity Results for American Options Using a Change of Measure,” Seventh Annual Conference on Financial Economics and Accounting, November 1996.

## **Consulting**

- Fuji Securities, 1994-1995.
- Nesbitt-Burns Securities, 1995-1996.
- William A. Barr and Associates, 1996-1998.

### **Academic and Teaching Awards**

- Barclays Global Investors/Michael Brennan Runner-Up Award for the best paper published in Volume 15 of the *Review of Financial Studies* for “An Isomorphism between Asset Pricing Models with and without Linear Habit Formation” (with Costis Skiadas), June 2003.
- Excellence in teaching award, Michigan State University, 1999-2000 and 2004-2005.
- Awarded summer research grant, MSU, 2004.
- Awarded summer research grants, SUNY at Buffalo, 1997 and 1998.

### **Teaching Experience**

- SUNY at Buffalo: MGF 301, undergraduate introductory financial management; MGF 405, advanced undergraduate corporate finance; MGF 633, MBA investments; MGF 737, Ph.D. asset pricing; and MGF 696, MBA financial derivatives course.
- Michigan State University: FI 852, MBA financial derivatives course; FI 379, undergraduate actuarial financial derivatives class; FI 478, undergraduate financial derivatives course; and FI 982, Ph.D. asset pricing course.