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Sanjay K. Nawalkha

EDUCATION

Ph.D., Finance. September 1990. UNIVERSITY OF MASSACHUSETTS, Amherst, Massachusetts. Dissertation Topic, "<u>Innovations in Interest Rate Risk Management: New Models and Strategies</u>."

M.B.A., Finance. May 1987. UNIVERSITY OF MASSACHUSETTS, Amherst, Massachusetts.

B.Sc., Mathematics. October 1984. ST. XAVIER'S COLLEGE, UNIVERSITY OF MUMBAI, MUMBAI, India.

ACADEMIC EXPERIENCE

09/2018 to present	<i>Professor</i> , Department of Finance, Isenberg School of Management, UNIVERSITY OF MASSACHUSETTS, Amherst.
01/2013 to 08/2018	Professor and Chairman, Department of Finance, Isenberg School of Management, UNIVERSITY OF MASSACHUSETTS, Amherst.
09/2011 to 12/2012	Professor and Finance Area Head, Isenberg School of Management, UNIVERSITY OF MASSACHUSETTS, Amherst.
09/2010 to 08/2011	Professor of Finance, Isenberg School of Management, UNIVERSITY OF MASSACHUSETTS, Amherst.
09/2001 to 08/2009	Associate Professor of Finance, Isenberg School of Management, UNIVERSITY OF MASSACHUSETTS, Amherst.
Sept. 1998 to May 2001	Associate Professor of Finance (Untenured), Isenberg School of Management, UNIVERSITY OF MASSACHUSETTS, Amherst.
Sept. 1997 to May 1998	Visiting Associate Professor of Finance, INDIANA UNIVERSITY, Bloomington.
Sept. 1996 to May 1997	Associate Professor of Finance (tenured), UNIVERSITY OF BALTIMORE, Baltimore.
Sept. 1990 to May 1996	Assistant Professor of Finance, UNIVERSITY OF BALTIMORE, Baltimore.

RESEARCH AND PUBLICATIONS

PUBLISHED BOOKS AND MONOGRAPHS

- 1. Nawalkha, Sanjay K., Natalia A. Beliaeva, and Gloria M. Soto, 2007, "*Dynamic Term Structure Modeling: The Fixed Income Valuation Course*," Wiley Finance, John Wiley and Sons, 683 pages.
- 2. Nawalkha, Sanjay K., Gloria M. Soto, and Natalia A. Beliaeva, 2005, "Interest Rate Risk Modeling: The Fixed Income Valuation Course," Wiley Finance, John Wiley and Sons, 496 pages.
- 3. Nawalkha, Sanjay K. and Donald R. Chambers (Editors), 1999, "Interest Rate Risk Measurement and Management," Institutional Investor, New York, 568 pages.
- 4. Lacey, Nelson J. and Sanjay K. Nawalkha, 1990, "Closed Form Duration Measures and Strategy Applications," The Research Foundation of the Institute of Chartered Financial Analysts, Charlottesville, Virginia.

This research project was funded by the Research Foundation of the Institute of Chartered Financial Analysts.

An abstract of this Monograph prepared by Robert L. Whalen appeared in the <u>CFA</u> <u>Digest</u>, 1990, (Fall), 12-14.

BOOKS IN PROGRESS

1. Nawalkha, Sanjay K., Natalia A. Beliaeva, and Gloria M. Soto, 2022, "*Credit Risk and Return Modeling: The Fixed Income Valuation Course*," Wiley Finance, John Wiley and Sons. Work in progress.

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- 1. Nawalkha, Sanjay K. and Xiaoyang Zhuo, 2022, "A Theory of Equivalent Expectation Measures for Contingent Claim Returns," accepted, <u>The Journal of Finance</u>.
- 2. Koh, Rachel and Sanjay Nawalkha, 2020, "Firm Efficiency and the Investment Anomalies," Managerial Finance, Vol. 46 No. 12, pp. 1589-1603.
- 3. Beliaeva, Natalia, Rachel Koh and Sanjay K. Nawalkha, 2018, "Yields versus Expected Returns of Corporate Bonds: Some Unexpected Results, <u>The Journal of Fixed Income</u>, Vol. 27 (3) 23-36.

- 4. Nawalkha, Sanjay K. and Gloria M. Soto, 2016, "Term Structure Estimation," <u>Alternative Investment Analyst Review</u>, Fourth Quarter, Vol. 5.
- 5. Beliaeva, Natalia, Nawalkha, Sanjay K., 2012, "Pricing American Interest Rate Options Under the Jump Extended Constant-Elasticity-of-Variance Short Rate Models," Journal of Banking and Finance, Vol. 36, No.1, 151-163.
- 6. Nawalkha, Sanjay K., and Riccardo Rebonato, 2011, "What Interest Rate Models to Use? Buy Side versus Sell Side. <u>Journal of Investment Management</u>, Third quarter.
- 7. Nawalkha, Sanjay K., Jose Alberto de Luca, and Gloria Soto, 2011, "Simple Formulas for Financial Analysts for Pricing Zero-Dividend and Positive-Dividend Stocks," Investment Management and Financial Innovations, Vol. 8(1), 40-50.
- 8. Nawalkha, Sanjay K., Natalia A. Beliaeva, and Gloria M. Soto, 2010, "A New Taxonomy of Dynamic Term Structure Models," <u>Journal of Investment Management</u>, Third quarter.
- 9. Nawalkha, Sanjay K., 2010, "The LIBOR/SABR Market Model: A Critical Review," <u>Journal of Investment Management</u>, second quarter, 101-22.
- 10.Beliaeva, Natalia A. and Sanjay K. Nawalkha, 2010, "A Simple Approach to Pricing American Options under the Heston Stochastic Volatility Model, <u>The Journal of Derivatives</u>, (Summer).
- 11. Nawalkha, Sanjay K. and Gloria M. Soto, 2009, "Managing Interest Rate Risk: The Next Challenge," <u>Journal of Investment Management</u>, third quarter, 82-96.
- 12. Nawalkha, Sanjay K., and Natalia Beliaeva, 2007, "Efficient Trees for CIR and CEV Short Rate Models," Journal of Alternative Investments, (Summer), 71-90.
- 13. Beliaeva, Natalia A., Sanjay K. Nawalkha, and Gloria M. Soto, 2008, "Pricing American Interest Rate Options Under the Jump-Extended Vasicek Model," <u>The Journal of Derivatives</u>, (Fall), 29-43.
- Nawalkha, Sanjay K., and Saira Latif, 2004, "Measuring True Risk Exposure," <u>Banking Today</u>, (July/August), 23-27.
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- 15. Nawalkha, Sanjay K., and Christopher Schwarz, 2004, "The Progeny of CAPM," Journal of Investment Management, Third quarter.
- 16. Nawalkha, Sanjay K., Jun Zhang, and Gloria M. Soto, 2003, "Generalized M-Vector Models for Hedging Interest Rate Risk," <u>Journal of Banking and Finance</u>, Vol. 27,

- 17. Chambers, Donald, M., and Sanjay K. Nawalkha, 2001, "An Improved Approach to Computing Implied Volatility," The Financial Review, Vol. 36, No. 3, 89-100.
- 18. Crack, Timothy and Sanjay K. Nawalkha, 2001, "Common Misunderstandings Concerning Duration and Convexity," <u>Journal of Applied Finance</u>, Vol. 11, 82-92.
- 19. Nawalkha, Sanjay K., Jun Zhang, Nelson J. Lacey, and Joel N. Morse, 2000, "Duration and Convexity of Inverse Floating Rate Bonds," <u>Journal of Research in Finance</u>.
- 20. Crack, Timothy and Sanjay K. Nawalkha, 2000, "Interest Rate Sensitivities of Bond Risk Measures," <u>Financial Analysts Journal</u>, Vol. 56, (January-February), 34-43.
- 21. Nawalkha, Sanjay K., Jun Zhang, and Donald R. Chambers, 1999, "Pricing and Duration of Floaters and Interest Rate Swaps with Embedded Options," <u>Journal of Alternative Investments</u>, (Spring), 58-70.
- 22. Nawalkha, Sanjay K., 1997, "A Multibeta Representation Theorem for Linear Asset Pricing Theories," <u>Journal of Financial Economics</u>, Vol. 46, No. 3, 357-381.
- 23. Nawalkha, Sanjay K. and Donald R. Chambers, 1997, "The M-Vector Model: Derivation and Testing of Extensions to M-Square," <u>Journal of Portfolio Management</u>, (Winter), 92-98.
- 24. Nawalkha, Sanjay K., 1996, "A Contingent Claims Analysis of the Interest Rate Risk Characteristics of Corporate Liabilities," <u>Journal of Banking and Finance</u>, Vol. 20, No. 2, 227-245.
- 25. Morse, Joel, Robert Nash, Jack C. Francis, and Sanjay K. Nawalkha, 1996, "Equity Swaps: Motivations and Applications," <u>Derivatives Risk Management Service</u>, (May), 3C1-16.
- 26. Nawalkha, Sanjay K. and Donlad R. Chambers, 1996, "An Improved Immunization Strategy: M-Absolute," <u>Financial Analysts Journal</u>, (September-October), 69-76.
- 27. Nawalkha, Sanjay K., 1995, "The Duration Vector: A Continuous-Time Extension to Default-Free Interest Rate Contingent Claims," <u>Journal of Banking and Finance</u>, Vol. 19, No. 8, 1359-1378.
- 28. Nawalkha, Sanjay K., 1995, "Face Value Convergence for Stochastic Bond Price Processes: A Note on Merton's Partial Equilibrium Option Pricing Model," <u>Journal of Banking and Finance</u>, Vol. 19, No. 2, 153-164.

- 29. Nawalkha, Sanjay K. and Donald R. Chambers, 1995, "A Note on Currency Option Pricing," <u>International Review of Financial Analysis</u>, Vol. 4, No. 1, 81-84.
- 30. Nawalkha, Sanjay K. and Donlad R. Chambers, 1995, "The Binomial Model and Risk Neutrality: Some Important Details," <u>Financial Review</u>, Vol. 30, No. 3, 605-615.
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 An abstract of this paper prepared by Robert A. McLean appeared in the <u>CFA Digest</u>, 1994, (Spring), 36-38.
- 32. Nawalkha, Sanjay K. and Nelson J. Lacey, 1992, "Immunizing Bond Portfolios in Multiple Term Structure Economy," <u>The International Review of Economics and Finance</u>, Vol. 1, No. 3, 235-246.
- 33. Nawalkha, Sanjay K. and Nelson J. Lacey, 1991, "Convexity For Bonds With Special Cash Flow Stream Bonds," <u>Financial Analysts Journal</u>, (January-February), 80-82.
- 34. Nawalkha, Sanjay K., Nelson J. Lacey, and Tom Schneeweis, 1990, "Closed Form Solutions of Convexity and M-Square," <u>Financial Analysts Journal</u>, (January-February), 75-77.
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- 36. Nawalkha, Sanjay K. and Nelson J. Lacey, 1988, "Closed Form Solutions of the Higher Order Duration Measures," <u>Financial Analysts Journal</u>, (November-December), 82-84.

Chapters in Books

37. Nawalkha, Sanjay K., "Duration Sixty Years Later," 1999, in Nawalkha, S.K. and D.R. Chambers (Editors), "*Interest Rate Risk Measurement and Management*," Institutional Investor, New York, 1999.

WORKING PAPERS AND RESEARCH IN PROGRESS

- 1. Nawalkha, Sanjay K. and Xiaoyang Zhuo, 2022, "The Risk and Return Dynamics of Optioned Portfolios." Working paper, University of Massachusetts, Amherst.
- 2. Beliaeva, Natalia A., Ye Chen, Sanjay K. Nawalkha, Michael Sullivan, and Sami Zriek 2022, "Pricing American Options under Low-Dimensional Stochastic Volatility Models," Working Paper, University of Massachusetts, Amherst.
- 3. Beliaeva, Natalia A., Ye Chen, Sanjay K. Nawalkha, and Michael Sullivan, 2022,

- "Pricing American Options under Levy Models with Stochastic Volatility," Working Paper, University of Massachusetts, Amherst. Submitted to the Journal of Derivatives.
- 4. Peter Kardos, Bernhard Leidner, and Sanjay K. Nawalkha, 2022. "Playing Economic Games with Relational Archetypes," research in progress.

OTHER PUBLICATIONS

- 1. Nawalkha, Sanjay K., A Review essay on the book, "Pricing Corporate Securities as Contingent Claims," by Kenneth Garbade, published in <u>Journal of Economic Literature</u>, Vol. 41, December 2003, p. 1297.
- 2. Nawalkha, Sanjay K., 2008, "Making Sense of the Credit Crisis," <u>UMassAmherst</u> Alumni Association News.
- 3. Nawalkha, Sanjay K., 2007, "Navigating the Risky Waters of Fixed Income Investments," <u>The Common Wealth Magazine</u>, Summer Issue.

PROFESSIONAL SERVICE

Professional Referee

Journal of Financial and Quantitative Analysis
Journal of Banking and Finance
Financial Analysts Journal
Journal of Risk
Journal of Investment Management
European Financial Management
Journal of Alternative Investments
Quantitative Finance
Journal of Economics and Business

Review of Quantitative Finance and Accounting

Sanjay K. Nawalkha

Applied Financial Economics
International Review of Economics and Finance
Financial Review
Journal of Hospitality Financial Management

Associate Editor, International Journal of Financial Innovation in Banking, 2014-present.