RANGARAJAN K. SUNDARAM

Richard R. West Dean
Edward I. Altman Professor of Credit & Debt Markets
Stern School of Business
New York University
New York, NY 10012

Education:

Ph.D., 1988, Department of Economics, Cornell University, Ithaca, NY 14853.

M.A., 1987, Department of Economics, Cornell University, Ithaca, NY 14853.

M.B.A., 1984, Indian Institute of Management, Ahmedabad 380 015, India.

B.A., 1982, Loyola College, University of Madras, Madras 600 034, India.

Academic Leadership Appointments:

January 2018 to date: Richard R. West Dean, Stern School of Business, New York University

January 2016 to December 2017: Vice Dean of MBA Programs & Online Learning, Stern School of Business, New York University

As dean and vice-dean, I have led and overseen, among other things:

- Record levels of fundraising
- Record incoming class statistics and student career outcomes
- Significant increase in student aid and accessibility of our programs including the establishment of the Berkely Achievement Scholars and the Fertitta Military Veterans Programs, and a large expansion of the Breakthrough Scholars Leadership Program
- The establishment of the first school-wide office for diversity and inclusion
- The launch of 10 new degree programs and the creation of new options in two others
- Expansion our global footprint via new programs in Shanghai and London and one planned in Abu Dhabi
- Expansion of our cyber footprint through launch of our first online certificate courses and our first online degree program
- Establishment of new and successful centers like the Endless Frontier Labs and the Chen Institute for Global Real Estate Finance
- Expansion of our ties with the rest of the University via both our new programs and our centers

Full-Time Academic Appointments

July 1996 to date: Professor of Finance, Stern School of Business, New York University,

July 1988 to July 1996: Professor, Department of Economics, University of Rochester

Other Information

Member, DFS Equity and Opportunity Advisory Council, New York State (2022 to date)

Academic Advisory Board memberships:

- Academic Advisory Council, Krea University, India (2019 to date)
- Academic Advisory Council, Shiv Nadar University, India (2021 to date)
- International Advisory Council, IIM-Bangalore, Bangalore, India (2021 to date)
- Advisory Board, Antai College, Shaghai Jiaotong University, China (2021 to date)

Chair of the NYU Faculty Senators Council, 2013-14; reelected by acclamation in 2014-15.

Co-Founder and (non-executive) Director:

- Capital Metrics & Risk Solutions (P) Ltd., Pune, India.
- Purnartha Investment Advisors, Pune, India.

Extensive consultancy and expert services experience; client list available on request (ceased all consultancy activity after becoming Vice Dean in Jan 2016)

Visiting Academic Appointments:

Institute for Financial Management and Research, Chennai, India, AY 2007-08.

Indian School of Business, short-term visits in 2003, 2004, 2005.

Stern School of Business, New York University, Spring 1995 and AY 1995-96.

Department of Economics, New York University, November-December 1994.

Division of Humanities and Social Sciences, California Institute of Technology, AY 1991-92.

Department of Economics, Cornell University, Summer 1989.

Publications:

A) Books:

A First Course in Optimization Theory, 1996, Cambridge University Press, Cambridge and New York; currently in its 22nd printing.

Derivatives: Principles and Practice, 2010; second edition 2015; McGraw-Hill (with Sanjiv Das).

B) Articles:

Underwriting Government Debt Auctions: Auction Choice and Information Production, *Management Science* 67(5), May 2021 (with Sudip Gupta and Suresh Sundaresan).

Risk-Sharing and the Creation of Systemic Risk, Journal of Risk and Financial Management 13(8), 2020 (with Viral Acharya and Aaditya Iyer).

Cash Holdings and Bank Compensation, *Economic Policy Review* 22(1), May 2016 (Special Issue on Behavioral Risk Management in the Financial Services Industry), Federal Reserve Bank of New York (with Viral Acharya and Hamid Mehran).

Inventory Effects, the Winner's Curse, and Bid Shading in CDS Auction Outcomes, *Journal of Derivatives* 23(2), Winter 2015, 36-52 (with Sudip Gupta)

Mispricing and Arbitrage in CDS Auctions, *Journal of Derivatives* 22(4), Summer 2015, 79-91 (with Sudip Gupta).

CDS Auctions and Recovery Rates: An Appraisal, *Journal of Derivatives* 20(3), Spring 2013, 97-102.

First-Purchase Rights: Rights of First Refusal and Rights of First Offer, *American Law & Economics Review* 2012; doi: 10.1093/aler/ahs014.

Derivatives in Financial Market Development, project sponsored by the Department for International Development of the UK Government via the International Growth Center, London School of Economics. Paper available at http://www.theigc.org/publications/working-paper/derivatives-financial-market-development.

Cross-Country Variations in Capital Structures: The Role of Bankruptcy Codes, *Journal of Financial Intermediation* 20(1), January 2011, pp.25-54 (with Viral Acharya and Kose John).

Governance, Incentives, and Fair Value Accounting Overview, in *Restoring Financial Stability: How to Repair a Failed System*, (V. Acharya and M. Richardson, Eds.), Wiley Finance, pp.179-184 (with Viral Acharya).

Corporate Governance in the Modern Financial Sector, in *Restoring Financial Stability: How to Repair a Failed System*, (V. Acharya and M. Richardson, Eds.), Wiley Finance, pp.185-196 (with Viral Acharya and others).

The Financial Sector Bailout: Sowing the Seeds of the Next Crisis?, in *Restoring Financial Stability: How to Repair a Failed System*, (V. Acharya and M. Richardson, Eds.), Wiley Finance, pp.327-340 (with Viral Acharya) .

An Integrated Model for Hybrid Derivatives, *Management Science* 53, September 2007, 1439-1451(with Sanjiv Das).

Pay Me Later: Inside Debt and its Role in Executive Compensation, *Journal of Finance* 62(4), 1551-1588, August 2007 (with David Yermack) (lead article in the issue).

When does Strategic Debt-Service Matter? in *Economic Theory* 29, pp. 363-378, 2006 (with V. Acharya, J. Huang and M.G. Subrahmanyam).

On Rescissions in Executive Stock Options, *Journal of Business* 78(5), pp. 1809-1835, September 2005 (with Menachem Brenner and David Yermack).

Generalized Bandits Problems, in *Social Choice and Strategic Decisions*, (David Austen-Smith and John Duggan, Editors), Springer-Verlag, 2005.

The Foundations of Freezeout Laws in Takeovers, *Journal of Finance* 59(3), pp. 1325-1344, June 2004 (with Yakov Amihud and Marcel Kahan).

On the Regulation of Fee Structures in Mutual Funds, in *Mathematical Modeling in Finance* Vol III, Courant Institute of Mathematical Sciences (with Sanjiv R. Das).

Fee Speech: Signaling, Risk-Sharing, and the Impact of Fee Structures on Investor Welfare, *Review of Financial Studies* 15(5), pp. 1465-97, Winter 2002 (with Sanjiv R. Das).

Discrete-Time Arbitrage-Free Pricing of Credit Derivatives with Ratings Transitions, *Financial Analysts Journal* May-June 2002, pp. 28-44 (with Viral V. Acharya and Sanjiv R. Das).

Survival and the Art of Profit Maximization, *Review of Economic Design* 6, December 2001, pp. 429-446 (with Prajit Dutta).

The Merton/KMV approach to Pricing Credit Risk, *Extra Credit* January/February 2001, pp. 59–68.

- Reprinted in *The Handbook of Collateralized Debt Obligations*.

On the Optimality of Resetting Executive Stock Options, *Journal of Financial Economics* 57, July 2000, pp. 65-101 (with Viral Acharya and Kose John).

Altering the Terms of Executive Stock Options, *Journal of Financial Economics* 57, July 2000, pp. 103–128 (with Menachem Brenner and David Yermack).

Stochastic Mean Models of the Term-Structure of Interest Rates, in *Advanced Tools for the Fixed-Income Professional* (B. Tuckman and N. Jegadeesh, Eds.), John Wiley and Sons, New York, 2000 (with P. Balduzzi, S.R. Das, and S. Foresi).

A Discrete–Time Approach to Arbitrage-Free Pricing of Credit Derivatives, *Management Science* 46(1), January 2000, pp. 46–62 (with Sanjiv R. Das).

- Reprinted in: *Mathematical Modeling in Finance* Vol III, Courant Institute of Mathematical Sciences.

Of Smiles and Smirks: A Term-Structure Perspective, *Journal of Financial and Quantitative Analysis* 34(2), June 1999, pp. 211–239 (with Sanjiv R. Das).

Optimal Agent Retention in Principal/Agent Models, *Journal of Economic Theory* 82(3), October 1998, pp. 293–323 (with Jeffrey S. Banks) (lead article in the issue).

The Equilibrium Existence Problem in General Markovian Games, in *Organizations with Incomplete Information: Essays in Economic Analysis—A Tribute to Roy Radner*, (M. Majumdar, Editor), Cambridge University Press, Cambridge and New York, 1998 (with Prajit K. Dutta).

Equivalent Martingale Measures and Risk-Neutral Pricing: An Expository Note, *Journal of Derivatives*, Fall 1997, pp. 85–98.

A Simple Approach to Three-Factor Models of Interest Rates, *Journal of Fixed Income* 6(3), 1996 (with Pierluigi Balduzzi, Sanjiv R. Das, and Silverio Foresi).

Auction Theory: A Summary with Applications to Treasury Bill Auctions, *Financial Markets, Institutions, and Investments* 5(5), 1996, pp.1–36 (with Sanjiv R. Das).

Switching Costs and the Gittins Index, *Econometrica* 62(3), May 1994, pp. 687–694 (with Jeffrey S. Banks).

Parametric Continuity in Dynamic Programming Problems, *Journal of Economic Dynamics and Control* 18, 1994, pp. 1069–1092 (with Prajit K. Dutta and Mukul Majumdar).

The Tragedy of the Commons? *Economic Theory* 3(3), July 1993, pp. 413-426 (with Prajit K. Dutta).

How Different Can Strategic Models Be? *Journal of Economic Theory* 60(1), June 1993, pp. 42-62 (with Prajit K. Dutta).

Adverse Selection and Moral Hazard in a Repeated Elections Model, in *Political Economy; Institutions, Information, Competition and Representation*, (W. Barnett, M. Hinich, N. Schofield and H. Rosenthal, Eds.), Cambridge University Press, New York, 1993 (with Jeffrey S. Banks).

Bayesian Economists,..., Bayesian Agents: An Alternative Approach to Optimal Learning, *Journal of Economic Dynamics and Control* 17(2), April 1993, pp. 355-383 (with Mahmoud A. El-Gamal).

Denumerable-Armed Bandits, *Econometrica* 60(5), September 1992, pp. 1071-1096 (with Jeffrey S. Banks).

A Class of Bandit Problems Yielding Myopic Optimal Strategies, *Journal of Applied Probability*, September 1992, pp. 625-632 (with Jeffrey S. Banks).

Markovian Equilibrium in a Class of Stochastic Games: Existence Theorems for Discounted and Undiscounted Models, *Economic Theory* 2(2), April 1992, pp. 197-214 (with Prajit K. Dutta).

Repeated Games, Finite Automata, and Complexity, *Games and Economic Behavior* 2(2), June 1990, pp. 97-117 (with Jeffrey S. Banks).

Symmetric Stochastic Games of Resource Extraction: The Existence of Non-Randomized Stationary Equilibrium, in *Stochastic Games and Related Topics* (T.S. Ferguson, T.E.S. Raghavan, T. Parthasarathy, and O. Vrieze, Eds.), Kluwer Academic Publishing, The Netherlands, 1991 (with Mukul Majumdar).

Perfect Equilibrium in a Class of Symmetric Dynamic Games, *Journal of Economic Theory* 47(1), February 1989, pp. 153-177.

An Alternative Approach to Axiomatizations of the Von Neumann-Morgenstern Characteristic Function, *Mathematical Social Sciences,* April 1988, pp. 145-157 (with Alain A. Lewis).

C) Unpublished Papers:

Investment and Contagion Tradeoffs between Fair Value and Historical Cost Accounting, revised version of earlier paper titled "To Mark or Not to Mark: That is the Question," 2021 (with Viral Acharya and Saptarshi Mukherjee).

On the Determinants of Sovereign CDS Spreads, November 2014 (with Sudip Gupta).

The Eurozone Membership Impact on Sovereign Creditworthiness, first draft October 2014; revised September 2017 (with Songtao Wang).

ETFs, Volatility Products, and Other Instruments in the Indian Context, policy paper for the NSE-NYU Stern India Initiative, January 2014 (with Viral Acharya and Marti Subrahmanyam)

On the Hedging Efficacy of Commodity Futures Contracts: A Comment, 2008 (with C.A. Yoonus).

Do Bankruptcy Costs Affect Firm Leverage? Evidence from Time-series and Cross-Country Variation in Bankruptcy Codes, Working Paper, Stern School of Business and London Business School; 2006, revised 2009 (with Viral Acharya and Rong Leng).

A Numerical Algorithm for Optimal Consumption-Investment Problems, mimeo, 2000 (with Sanjiv R. Das).

Proportionate Liability vs. Joint-and-Several Liability: Does the Choice of Regime Matter?, mimeo, Department of Economics, University of Rochester, 1995 (with Dhananjay K. Gode).

The Non-Existence of Perfect Equilibrium in Infinite State Stochastic Games, mimeo, Department of Economics, University of Rochester, 1994 (with Prajit Dutta).

Awards

Ascend A-List honoree, 2020.

At Stern and NYU:

- Max L. Heine Professor of Finance, 2015-16
- Stern Leadership Award, Stern School of Business, 2015
- Bank One Faculty Fellow, Stern School of Business, 2014-15
- Yamaichi Faculty Fellow, Stern School of Business, 2005-14
- Distinguished Teaching Award, Stern School of Business, 2007 (Inaugural recipient)
- Excellence in Teaching Award, NYU Stern Executive Programs, 2005.
- Finalist for the Brattle Prize from the *Journal of Finance*, 2005.
- Jensen Award from the *Journal of Financial Economics*, 2001.
- CIBC Award, Stern School of Business, 2000.
- Glucksman Institute Prize, Best Paper, 1999.
- Glucksman Institute Prize, Second Best Paper, 1999.

At the University of Rochester and NYU:

- National Science Foundation Three-year grant (1994-1997).

As a student:

- University Graduate Fellowship (1986–87), Cornell University.
- Andrew D. White Graduate Fellowship (1984-85 and 1985-86), Cornell University.
- N. Krishna Iyer Medal for Economics, Loyola College, University of Madras, 1981.
- Loyola College Medal for Economics, Loyola College, University of Madras, 1980.
- Father Leigh Medal for English, Loyola College, University of Madras, 1980.

Academic Editorships & Refereeing:

Co-Editor, *Journal of Derivatives*, 2002 to 2008.

Associate Editor of:

- *Journal of Economic Theory,* 1993 to 2002
- *Management Science*, 2006 to 2008
- *Review of Derivatives Research,* 2000 to 2006

- *Journal of Emerging Market Finance*, 2000 to 2006

Reviewer, *Mathemetical Reviews*, 1990–94.

Referee for

- *American Economic Review*
- *American Political Science Review*
- *Econometrica*
- *Economic Theory*
- *Finance Research Letters*
- *Finance and Stochastics*
- *Financial Analysts Journal*
- *Financial Management*
- *Games and Economic Behavior*
- *International Journal of Game Theory*
- *Journal of Banking and Finance*
- *Journal of Business*
- *Journal of Derivatives*
- *Journal of Econometrics*
- *Journal of Economic Dynamics and Control*
- *Journal of Economic Theory*
- *Journal of Economics and Environmental Management*
- *Journal of Finance*
- *Journal of Financial and Quantitative Analysis*
- *Journal of Financial Economics*
- *Journal of Financial Intermediation*
- *Journal of Financial Stability*
- *Journal of Monetary Economics*
- *Management Science*
- *Mathematics of Operations Research*
- *Review of Derivatives Research*
- *Review of Economic Design*
- *Review of Economic Studies*

- *Review of Finance*
- *Review of Financial Studies*
- *SIAM Review (SIREV)*
- *Test (Spanish Journal of Statistics)*
- *National Science Foundation.*
- *Netherlands Organization for Scientific Research*
- *Social Sciences and Humanities Research Council of Canada.*

Teaching Information: Courses Taught

PhD Level (At NYU and Rochester)

- Derivatives Modeling and Pricing.
- Financial Theory I: Foundations of Finance
- Financial Theory IV: Continuous-Time Finance
- Seminar in Financial Institutions.
- Seminar in Credit Risk.
- Game Theory.
- Mathematical Economics & Optimization.

MBA Level (At NYU & the Indian School of Business)

- Futures & Options.
- Advanced Derivatives.
- Corporate Finance.

Executive MBA (At NYU)

- Introduction to Derivatives.
- Advanced Derivatives.

Undergraduate (At NYU, Rochester, Caltech, and Cornell)

- Futures & Options.
- Principles of Economics.
- Intermediate Microeconomics.
- Game Theory.
- Industrial Organization.
- Mathematical Economics.