# **RAJNISH MEHRA**

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# **EDUCATION**

1978	Ph.D. in Finance, Graduate School of Industrial Administration, Carnegie-Mellon University.
1975	M.S. in Industrial Administration, Graduate School of Industrial Administration, Carnegie-Mellon University.
1974	M.S. in Computer Science, Department of Electrical Engineering Rice University.
1972	B. Tech in Electrical Engineering, Indian Institute of Technology, Kanpur, India.
1966 - 67	1 <sup>st</sup> year BSc (Hons) Mathematics, St. Stephen's College, University of Delhi, India.

## ACADEMIC APPOINTMENTS

2010 - Present	<ul><li>E.N. Basha Arizona Heritage Endowed Chair</li><li>Professor of Finance and Economics</li><li>W.P. Carey School of Business Arizona</li><li>State University, Tempe, AZ.</li></ul>
2012 - 2016	Deutsche Bank Luxembourg Professor of Finance Luxembourg School of Finance.
1988 - 2010	Professor of Finance Department of Economics University of California, Santa Barbara, CA.

1987 - 1989	Visiting Professor of Finance Sloan School of Management Massachusetts Institute of Technology, Cambridge, MA.
1985 - 1988.	Associate Professor of Finance Department of Economics University of California, Santa Barbara, CA.
1977 - 1985	Assistant and Associate Professor of Finance Graduate School of Business Columbia University, New York, NY.
1976 - 1977	Assistant Professor of Finance School of Business Queens University, Kingston, Canada.

# SABBATICALS AND SHORT APPOINTMENTS

Fall 2010 Spring 2010 Fall 2007 1995 - 2006	<ul> <li>Visiting Professor of Finance, Indian Business School.</li> <li>Sabbatical at the Graduate School of Business, Columbia University.</li> <li>Visiting Professor of Finance, London Business School.</li> <li>Visiting Professor of Finance, Graduate School of Business,</li> <li>University of Chicago. (Executive MBA teaching in Barcelona,</li> <li>Chicago, London and Singapore).</li> </ul>
Fall 2005	Sabbatical at the Swiss Banking Institute, University of Zurich.
Spring 2005	Sabbatical at the School of Management, Yale University.
Fall 2004	Visiting Professor of Finance, Sloan School of Management,
	Massachusetts Institute of Technology.
Fall 2000	Sabbatical at the Graduate School of Business,
	Stanford University.
Fall 1993	Sabbatical at the Research Department
	International Monetary Fund, Washington D.C.
Fall 1990	Sabbatical at the Wharton School,
	University of Pennsylvania, Philadelphia, PA.
Summer 1988	Visiting Scholar, Stockholm School of Economics
	Stockholm, Sweden.
Fall 1986	Visiting Associate, Institute of Economics and Statistics,
	University of Oxford, England.
Summer 1982	Visiting Scholar, Norwegian School of Economics and Business
	Administration, Bergen, Norway.

Summer 1981	Professor Invité, École des Hautes Études Commerciales,
	University of Lausanne, Switzerland.
Spring 1980	Visiting Assistant Professor, Graduate School of Management,
	University of California, Los Angeles, CA.
Fall 1979	Visiting Scholar, Graduate School of Business,
	University of Chicago, Chicago, IL.

#### PUBLICATIONS

- "On the Financing and Investment Decisions of Multinational Firms in the Presence of Exchange Risk," *Journal of Financial and Quantitative Analysis*, July, 1978, pp. 227-244.
- "Recursive Competitive Equilibrium: The Case of Homogeneous Households," (with E.C. Prescott), *Econometrica*, 48, September, 1980, pp. 1365-1379.

Reprinted in *Growth Theory*, edited by R. Becker and E. Burmeister, Edward Elgar Publishing Ltd., Brookfield, VT 1991.

Reprinted in *Theory of Valuation* by Sudipto Bhattacharya and George M. Constantinides World Scientific 2006

- "Stochastic Growth with Correlated Production Shocks," (with J.B. Donaldson), Journal of Economic Theory, 29, April, 1983, pp. 282-312.
- "On the Impact of Shock Persistence on the Dynamics of a Recursive Economy," (with J.P. Danthine and J.B. Donaldson), European Economic Review, 22, July, 1983, pp. 147-166.
- "Comparative Dynamics of An Equilibrium Intertemporal Asset Pricing Model," (with J.B. Donaldson), *The Review of Economic Studies*, 51, July, 1984, pp. 491-508.

Reprinted in *Growth Theory*, edited by R. Becker and E. Burmeister, Edward Elgar Publishing Ltd., Brookfield, VT 1991.

- "Recursive Competitive Equilibrium: A Parametric Example," *Economics Letters*, 16, December, 1984, pp. 273-278.
- "The Equity Premium: A Puzzle," (with E.C. Prescott), Journal of Monetary Economics, 15, March, 1985, pp. 145-161.

Reprinted in *The Economic Legacy of Robert Lucas, Jr*, edited by Kevin D. Hoover, Edward Elgar Publishing Ltd., Brookfield, VT 1998.

Reprinted as "El 'Equity Premium': un Dilema," *Cuadernos Economicos de ICE*, 42, November, 1989, pp. 123-37.

Reprinted in *Speculation and Financial Markets*, edited by Liam A. Gallagher and Mark P. Taylor., Edward Elgar: Cheltenham, UK, Nothampton, MA 2002.

Reprinted in *Financial Markets and the Real Economy*, edited by John Cochrane, Edward Elgar Publishing Ltd., Brookfield, VT 2006

Reprinted in *The International Library of Financial Econometrics*, edited by Andrew Lo, Edward Elgar: Cheltenham, UK, Nothampton, MA 2007

Reprinted in James Tobin, Franco Modigliani, Finn E. Kydland and Edward C. Prescott Pioneering Papers of the Nobel Memorial Laureates in Economics, edited by Howard R. Vane and Chris Mulhearn, Edward Elgar: Cheltenham, UK, Nothampton, MA 2010

Reprinted in *The Economics of Risk and Uncertainty*, edited by Christian Gollier, Edward Elgar: Cheltenham, UK, Nothampton, MA 2018

- "On the Existence and Representation of Equilibrium in an Economy with Growth and Nonstationary Consumption," *International Economic Review*, 29, February, 1988, pp. 131-135.
- "The Equity Risk Premium: A Solution?" (with E.C. Prescott), Journal of Monetary Economics, 22, July, 1988, pp. 133-136.
- "On Some Computational Aspects of Equilibrium Business Cycle Theory," (with J.P. Danthine and J.B. Donaldson), *Journal of Economic Dynamics & Control*, 13, July, 1989, pp. 449-470.
- "On the Term Structure of Interest Rates," (with J.B. Donaldson and T. Johnsen), Journal of Economic Dynamics and Control, 14, October, 1990, pp. 571-596.

Reprinted as "El comportamiento de la estructura temporal de los tipos de interés en un modelo de ciclos economicos," (joint with J.B. Donaldson & T. Johnsen), *Cuadernos Economicos de ICE*, 49, Fall, 1991, pp. 89-120.

- "The Equity Premium and the Allocation of Income Risk," (joint with J.P. Danthine & J.B. Donaldson), Journal of Economic Dynamics and Control, 16, July/October, 1992, pp. 509-532.
- "Auctions: Theory and Applications," (joint with R.A. Feldman), *IMF Staff Papers*, 40, September, 1993, pp. 485-511.
- "Dynamic Decentralization," (with J.B. Donaldson), in *Business Cycles, Panics and Depressions*, ed. by David Glassner, Garland Press, New York, 1997.
- "The Equity Premium Puzzle," in *Business Cycles, Panics and Depressions*, ed. by David Glassner, Garland Press, New York, 1997.
- "The Stock Market Crash of 1987," (with A.W. Kleidon) in Business Cycles, Panics and Depressions, David Glassner, ed., Garland Press, New York, 1997.
- "On the Volatility of Stock Prices: An Exercise in Quantitative Theory," International Journal of Systems Science, 29, November, 1998 pp. 1203-1211.
- "The Equity Premium," in *The Global Investor Book of Investing Rules* ed. by Philip Jenks and Stephen Eckett, Harriman House Ltd., Great Britain, 2001.

- "Mood Fluctuations, Projection Bias, And Volatility Of Equity Prices," (with Raaj Sah), Journal of Economic Dynamics and Control, 26, May, 2002, pp. 869-887.
- "Junior Can't Borrow: A New Perspective on the Equity Premium Puzzle," (with G.M. Constantinides and J.B. Donaldson), *Quarterly Journal of Economics*, 117, February, 2002, pp. 269-96.
- "Finance 2001," Journal of Economic Dynamics and Control, 26 6/7, 2002, pp. 1069-1074.
- "The Equity Premium: Why Is It A Puzzle?" *Financial Analysts Journal*, January /February 2003, pp 54-69. Awarded a Financial Analysts Foundation Graham and Dodd Scroll for excellence in financial writing.
- "The Equity Premium Puzzle in Retrospect," (with E.C. Prescott) Handbook of the Economics of Finance ed. by G.M Constantinides, M. Harris and R. Stulz, North Holland, Amsterdam, 2003.
- "Junior Must Pay: Pricing the Implicit Put in Privatizing Social Security," (with J.B. Donaldson and G.M. Constantinides), Annals of Finance, 1, January 2005, pp.1-34.
- "Junior is Rich: Bequests as Consumption," (with J.B. Donaldson and G.M. Constantinides). Economic Theory Volume 32, 2007, pp 125-155.
- "The Equity Premium in India," Oxford Companion to Economics in India, edited by Kaushik Basu, Oxford University Press, 2007.
- "The Equity Premium: ABCs," (with E.C. Prescott) The Handbook of the Equity Risk Premium, edited by Rajnish Mehra, Elsevier, Amsterdam, 2008, pp 1-36.
- "Risk Based Explanations of the Equity Premium" (with J.B Donaldson) Handbook of Investments: The Handbook of the Equity Risk Premium, edited by Rajnish Mehra, Elsevier, Amsterdam, 2008, pp 37-100.
- "Non Risk Based Explanations of the Equity Premium" (with E.C Prescott) Handbook of Investments: The Handbook of the Equity Risk Premium, edited by Rajnish Mehra, Elsevier, Amsterdam, 2008, pp 101-215.
- "Recursive Competitive Equilibrium," New Palgrave Dictionary of Economics, 2nd Edition, Macmillan, 2008, pp 35-38.
- "Indian Equity Markets: Measures of Fundamental Value", *India Policy Forum*, Volume 6, 2010, pp 1-30

- "Costly Financial Intermediation in Neoclassical Growth Theory" (with F. Piguillem and E.C. Prescott), *Quantitative Economics*, Volume 2, March 2011, pp.1-36.
- "The Equity Premium Puzzle Revisited" in *Rethinking the Equity Risk Premium*, edited by P. Brett Hammond, Martin L. Leibowitz, and Laurence B. Siegel, Research Foundation of CFA Institute, Charlottesville, Va. 2011.
- "The Equity Premium in India," *The New Oxford Companion to Economics in India*, edited by Kaushik Basu and Annemie Maertens, Oxford University Press, 2011.
- "Consumption-Based Asset Pricing Models", Annual Review of Financial Economics 4, 2012 385–409.
  - "The Term Structure of Interest Rates in India" (with Arunima Sinha), in *Monetary Policy in India: A Modern Macroeconomic Perspective*, edited by Chetan Ghate and Kenneth Kletzer, Springer 2016. pp 231-256.
- "A 21st Century Perspective on Asset Management" (joint with Jean Pierre Danthine and John Donaldson) in *Finance in Society*, edited by Mette Bjørndal, Frøystein Gjesdal and Aksel Mjøs. Cappelen Damm 2017. pp 55-68.
- "Evaluating Macroeconomic Interventions" in Carbon Emission Pricing and Climate Risk Management, edited by Robert Litterman. Wiley & Sons, (forthcoming).
- "Do Properly Anticipated Prices Fluctuate Randomly? Evidence from VIX futures markets" (with George Aragon and Sunil Wahal). Journal of Portfolio Management, 46(7), July 2020, pp.144-159.
- "Is Idiosyncratic Risk Conditionally Priced?" (with Sunil Wahal and Daruo Xie). *Quantitative Economics*, (forthcoming).

# BOOKS

- The Equity Premium Puzzle: A Review volume 2 in Foundations and Trends in Finance, Now Publishers Inc, Hanover, MA 2008
- The Handbook of the Equity Risk Premium, edited volume in the North Holland Handbook of Finance Series, Elsevier, Amsterdam, 2008

#### **EDITED VOLUMES**

Applications of Finance, Journal of Economic Dynamics and Control, 16, no. 3/4, 1992

Finance: New Paradigms in Finance, Journal of Economic Dynamics and Control, (Double Issue), 26, nos. 7-8, 2002

#### **OTHER PUBLICATIONS**

- Discussion of "Tax Breaks and Household Savings" India Policy Forum, Volume 14, 2017 -18.
- Discussion of "The Indian Household Finance Landscape " *India Policy Forum*, Volume 13, 2016 -17.
- Discussion of "The Policy Puzzles of Foreign Currency Borrowing by Indian Firms " India Policy Forum, Volume 12, 2015 16, pp 175-178.
- Discussion of "Sources of Corporate Profits in India: Business Dynamism or Advantages of Entrenchment?" *India Policy Forum*, Volume 7, 2010 11, pp 85-89.
- Discussion of "Can Schooling Policies Affect Schooling Inequality? An Empirical Evaluation of School Location Policies in India" *India Policy Forum*, Volume 4, 2007 8, pp 92-95.
- Discussion of "Sources of Growth in the Indian Economy" India Policy Forum, Volume 3, 2006 7, pp 53-58.
- Discussion of "How Applicable is the Inflation Targeting Framework (ITF) for India?" India Policy Forum, Volume 2, 2005 - 6, pp. 164-170.
- Discussion of "India's Experience with a Pegged Exchange Rate," *India Policy Forum*, Volume 1 2004, pp. 217-224.
- "Equity Risk Premium Forum: Current Estimates and Prospects for Change II," AIMR On Line Publication, <u>http://www.aimrpubs.org/ap/issues/v2002n1/toc.html</u>, June 2002.
- "Stocks and Bonds in the Portfolio Life-Cycle," (with S. J. Davis), *Financial Times* June 4, 2001.

Reprinted in *Mastering Investments*, ed. by James Pickford, FT-Prentice Hall, London, 2002.

"Equity Premium Puzzle," Financial Times May 28, 2001.

Reprinted in *Mastering Investments*, ed. by James Pickford, FT-Prentice Hall, London, 2002.

"Auctions: A Sampling of Techniques," (joint with R.A. Feldman), *Finance and Development*, 30, September, 1993, pp. 32-35.

Reprinted in Arabic, Chinese, French, German, Portuguese and Spanish.

"Role of Auctions in Countries Moving to Market Economies," *IMF Survey* 2, September, 1993, pp. 275-276.

#### CASE STUDY

Connecticut's Challenge: Defense Conversion in the 1990s, (with Benjamin Cohen), State Legislative Leaders Foundation, 1993.

#### WORKING PAPERS

- "Average Crossing Time: An Alternative Characterization of Mean Aversion and Reversion" (with J.B. Donaldson). NBER Working Paper No. 25519, revised January 2020.
- "Demographics and FDI: Lessons from China's One-Child Policy" (with John Donaldson, Christos Koulovatianos and Jian Li). NBER Working paper 24256, revised January 2020.

CO-EDITOR:	Annals of Finance 2017 - present Indian Growth and Development Review 2014 - present
EDITORIAL BOARD:	Annals of Finance 2004 - 2016
ASSOCIATE EDITOR:	Journal of Economic Dynamics and Control 1990 - 2008
	Global Finance Journal 1995 - 2005

#### ACADEMIC HONORS, KEYNOTE ADDRESSES AND RESEARCH AFFILIATIONS

Keynote Address at École Nationale Supérieure de Statistique et d'Economie Appliquée, ENSEA, Abidjan, Côte d'Ivoire Summer 2019. Member, Foundation for the Advancement of Research in Financial Economics (FARFE) 2018 Keynote Address: Association of the Luxembourg Fund Industry (ALFI) "Future Perfect" Conference, Luxembourg, Winter 2016 Non Resident Senior Fellow, National Council of Applied Economic Research (NCAER), New Delhi Keynote Address: Banque Centrale du Luxembourg, Summer 2015 Keynote Address: Inquire Europe Conference, Stockholm, Fall 2014 Keynote Address: ICEF at the Higher School of Economics, Moscow, Fall 2013 Keynote Address: Bombay Chamber of Commerce, Mumbai, Fall 2012 Keynote Address: India Development Policy Conference at the Indian Statistical Institute (ISI) Delhi, Summer 2012 Keynote Address: Perspectives on the Eurozone Conference, UBS and University of Luxembourg, Fall 2012 Keynote Speaker, Shanghai University of Finance & Economics, Summer 2011 Founding Director and Research Associate, Center for Advanced the Study in Economic Efficiency, Arizona State University Chazen Scholar, Columbia University, 2010 Thormahlen Family Fellowship 2009-2010 Public Lecture, University of New South Wales, 2008 20<sup>th</sup> CARF Special Lecture, University of Tokyo, Fall 2007 Keynote Speaker, Norges Handelshøyskole (NHH), Winter 2007 Academic Advisory Council, Great Lakes Institute of Management, Chennai, India Keynote Address, Brazilian Finance Association, 2005 Scott Scheon Fellow, Yale University, 2005 Distinguished Finance Scholar, University of Sydney, 2004 Keynote Address, Equity Premium Conference, University of Exeter, 2004 Graham and Dodd Scroll Award for excellence in financial writing awarded by the Financial Analysts Foundation for "The Equity Premium: Why Is It A Puzzle", Financial Analysts Journal, 2003 ISRO-Satish Dhawan Memorial Lecture, Bangalore, Fall 2003 Member, Research Panel, India Policy Forum (NCAER & Brookings). Research Associate, National Bureau of Economic Research. Senior Member, Institute of Electrical & Electronic Engineers. William Larimer Mellon Fellowship from GSIA, Carnegie-Mellon University, 1974 - 76. Fellowship from Carnegie-Mellon University, 1973 - 74. Tau Beta Pi, 1972. Fellowship from Rice University, 1972 - 73.

#### **RESEARCH GRANTS**

- National Science Foundation Grant: "Stochastic Properties of Dynamic Economies," (with J.B. Donaldson).
- National Science Foundation Grant: "Recursive Competitive Equilibrium: Some Theoretical Extensions," (with J.B. Donaldson).
- National Science Foundation Grant: "Dynamic Economics: Some Applications," (with J.B. Donaldson).
- Academic Senate Grant, University of California: "Dynamic Finance: Some Applications."
- Academic Senate Grant, University of California: "Monetary Models in Finance: A Framework for Policy Evaluation."
- Academic Senate Grant, University of California: "Dynamic Equilibria in the Presence of Efficiency Wage and Contracting Considerations."
- Academic Senate Grant, University of California: "On the Volatility of Stock Market Prices and Growth."

#### GRADUATE STUDENTS SUPERVISED

1978	William Lee	PhD	Columbia	MD, Citigroup Global Markets
1986	Vikram S. Pandit	PhD	$\operatorname{Columbia}$	Former CEO, Citigroup
1989	Antonio Bonnet <sup>*</sup>	MS	MIT	President,
				ACE International Consultants, Madrid
1989	Enrique Casanueva*	MS	MIT	Head of Spain Operations, JPMorgan Chase
1990	Edward B. Dumas	PhD	UCSB	Director of Basel II Assurance, Bank of America
1995	Aarne B. Dimanlig <sup>*</sup>	PhD	UCSB	Head, Market Risk Management,
				Bank of Philippines
1996	Yijuan Zheng *	PhD	UCSB	Global Wealth Manager, Merrill-Lynch
1997	Rong Gao *	PhD	UCSB	VP, Mellon Capital Management
1999	Kenji Wada	PhD	Chicago	Professor of Finance, Keio University
2000	Yongbae Moon $\ast$	PhD	UCSB	Hana Finance Group, South Korea
2002	Seok-Kyun Hur	PhD	Chicago	Fellow, Korea Development Institute
2004	Apollo Lupescu <sup>*</sup>	PhD	UCSB	VP, Dimensional Fund Advisors
2006	Wei Cui*	PhD	UCSB	Associate Professor, Peking University
2007	Francisco Azeredo <sup>*</sup>	PhD	UCSB	Associate Director, Navigant Economics
2007	Alok Khare <sup>*</sup>	PhD	UCSB	Senior Economist, AFE Consulting

2007	Oddegir Ottesen	PhD	UCSB	Senior Manager,
2007	Wan-Ru Yang *	PhD	UCSB	Financial Supervisory Authority, Iceland Assistant Professor, National University of Kaohsiung, Tiwan
2010	Joao Rosario*	PhD	UCSB	Assistant Professor, ISCTE-IUL, Lisbon
2012	Zhiyi Qian	PhD	ASU	Assistant Professor, Peking University
				Guanghua School of Management
2013	Jin Xian	PhD	ASU	Consultant, Northern Trust
2014	Kwan-shin Choi	PhD	ASU	Senior Economist,
				Financial Supervisory Service, Korea
2015	Daruo Xie <sup>**</sup>	PhD	ASU	Assistant Professor,
				Australian National University
2015	Tae Eui Lee <sup>**</sup>	PhD	ASU	Korea Energy Economics Institute
2016	Dimitrios Mavridis	PhD	LSF	European Commission
2017	Pedram Jahangiry <sup>*</sup>	PhD	ASU	Research Associate, Blackrock
2017	René Wells	PhD	LSF	Instructor, Haskayne School of Business
				University of Calgary
2017	Xuecan Cui	PhD	LSF	Assistant Professor,
				The Institute of Financial Studies, Chengdu

 $\ast$  Chair dissertation committee  $\ \ast\ast$  Co Chair dissertation committee

### **GRADUATE STUDENT (IN-PROGRESS)**

Tyler Beason<sup>\*\*</sup> Hamilton Galindo Yong Kim

### SELECTED UNIVERSITY SERVICE

Faculty Council, W.P. Carey School of Business, ASU, 2014 - present

University Senate, ASU, 2016 – present

Placement Director, Department of Economics, ASU, 2014 – 2015

External Reviewer, National Agency for the Evaluation of Universities and Research Institutes (ANVUR) Italy 2012.

Founding Director, Center for the Advanced Study in Economic Efficiency, ASU, 2008 -2009

External Reviewer, Masters Program in Finance, London Business School, 2007

Chairman, Department of Economics, UCSB, 2001 - 2004

Member, Faculty Advisory Board of the Center for Entrepreneurship and Engineering Management (CEEM) 2001 - 2004

Member, Board of Directors UCSB Economic Forecasting Project 2001 - 2004

Director, Joint Engineering/Economics Program, UCSB

Director, MAE/BE Program, UCSB

Planned, organized and conducted conference on "Restructuring America: The Challenge of Defense Conversion." A colloquium for state legislators and corporate leaders, focused on public policy in the post cold war era.

Chairman, Engineering/Economics Committee for the joint BS (Eng)/MA (Bus Econ) Program Conceived, initiated and successfully implemented a 5-year joint degree program in Engineering and Business Economics. This interdisciplinary program graduates students with Bachelors in Engineering and a Masters in Business Economics.

## MAJOR CONSULTING APPOINTMENTS

Vega Asset Management, New York NY.: Advisor for Quantitative Strategies.

HFR Asset Management: Member Index Committee.

Sonnenschein, Nath & Rosenthal, Chicago IL.: Expert Testimony for IPO Valuation.

Salomon Smith Barney, London.: Consultant to the Fixed Income Arbitrage Group on Proprietary Trades, Hedging and Valuation Techniques.

International Monetary Fund, Washington D.C.: Pension Fund Asset /Liability management.

International Monetary Fund, Washington D.C.: Auctions and Privatization in Eastern Europe

International Monetary Fund, Washington D.C.: Portfolio Hedging in the Presence of Price Jumps