GUR HUBERMAN January 2023

Robert G. Kirby Professor of Behavioral Finance Business School, Columbia University, NY NY 10027 gh16@Columbia.edu

EXPERIENCE

Academic

1989 - present: Professor, Graduate School of Business, Columbia University.

1986 - 1990: Senior Lecturer and Associate Professor, Department of Economics and Faculty of Management, Tel Aviv University. (Allon Fellow.)

Autumn 1987: Visiting Associate Professor, Graduate School of Business, Columbia University.

1980 - 1988: Assistant and Associate Professor of Finance and Management Science, Graduate School of Business, University of Chicago.

Spring 2012: Visiting Professor, EIEF, Rome.

Winter and spring 1983: Lady Davis Fellow, The Economics Department, The Hebrew University, Jerusalem.

Spring 1981: Research Fellow, CORE, Louvain-la-Neuve, Belgium.

Industry

1993 - 1995: Vice President, JP Morgan Investment Management. Developed and implemented quantitative investment strategies in equities and equity derivatives.

EDUCATION

1972-1975: B.Sc. (with distinction) in mathematics, Tel Aviv University 1975-1977: M.Sc. in mathematics, University of British Columbia 1977-1980: Ph.D. (with distinction) in operations research, Yale University

COURSES TAUGHT

Taught undergraduate, MBA and Ph.D. level courses in finance and economics. They included introductory finance, corporate finance, investments, derivative pricing, behavioral finance, blockchain and cryptocurrency.

Associate Editor, *Rivista bancaria - minerva bancaria*, 2012-present
Associate Editor, *Economic Notes*, 2012-present
Associate editor, *International Journal of Theoretical and Applied Finance*, 2004-present
Managing editor, *International Journal of Theoretical and Applied Finance*, 1998-2004

LIST OF PUBLICATIONS

- 1. "Qualitative Behavior of a Fishery System," Mathematical Biosciences 42, 1-14 (1978).
- 2. "Minimum Cost Spanning Tree Games," <u>Mathematical Programming</u> 21, 1-18 (1981) (with D. Granot).
- 3. "The Nucleolus and the Essential Coalitions," Rand P-6195.

 <u>Proceedings of the Fourth International Conference on Analysis and Optimization of Systems (1981)</u> (a refereed publication).
- 4. "Optimal Locations on a Line Are Interleaved," <u>Operations Research</u>, 30, 745-759 (1982) (with E. V. Denardo and U. G. Rothblum).
- 5. <u>"A Simple Approach to Arbitrage Pricing Theory."</u> <u>Journal of Economic Theory</u>, 28, 183-191 (1982). Reprinted in <u>Advances in Financial Economics: Volume I (Theory)</u>, Bhattacharya and Constantinides (editors), Roman and Allenhead publishers 1986.
- 6. "The Relationship Between Convex and Minimum Cost Spanning Tree Games: A Case for Permutationally Convex Games," <u>SIAM Journal on Algebraic and Discrete Methods</u>, 3, 288-292 (1982) (with D. Granot).
- 7. "Error Bounds for the Aggregated Convex Programming Problem," Mathematical Programming, 26, 100-108 (1983).
- 8. "Portfolio Turnpike Theorems, Risk Aversion and Regularly Varying Utility Functions," Econometrica, 51, 1345-1361 (1983) (with S. A. Ross).
- 9. "Optimal Insurance Policy Indemnity Schedules," Bell Journal of Economics, Autumn, 415-426 (1983) (with D. Mayers and C. W. Smith).
- 10. "On the Core and Nucleolus of Minimum Cost Spanning Tree Games," Mathematical Programming, 29, 323-347 (1984) (with D. Granot).
- 11. "Capital Asset Pricing in an Overlapping Generations Model," Journal of Economic Theory, 33, 232-248 (1984).
- 12. "External Financing and Liquidity" Journal of Finance, 39 895-908 (1984).
- 13. "Information Aggregation, Inflation and the Pricing of Indexed Bonds" Journal of Political Economy, 93, 92-114 (1985) (with G. W. Schwert).
- 14. "Mimicking Portfolios and Exact Arbitrage Pricing" Journal of Finance, 42, 1-9 (1987) (with S. Kandel and R. Stambaugh)
- 15. <u>"Arbitrage Pricing Theory"</u> The New Palgrave: A Dictionary of Economic Theory and Doctrine, 1987, 106-110.
- 16. "Value Line Rank and Firm Size" Journal of Business, 60, 577-589 (1987) (with S. Kandel).
- 17. "Mean Variance Spanning" Journal of Finance, 42, 873-888 (1987) (with S. Kandel).
- 18. "Optimality of Periodicity" Review of Economic Studies, 60, 127-138 (1988).
- 19. <u>"Limited Contract Enforcement and Strategic Renegotiation"</u> <u>American Economic Review</u>, 78, 471-478 (1988) (with C. Kahn).

- 20. "Two Sided Uncertainty and "Up or Out" Contracts" Journal of Labor Economics, 6, 423-444 (1988); reprinted in Personnel Economics, Lazear and McNabb, editors, Edward Elgar Publishing (2003?) (with C. Kahn).
- 21. "Strategic Renegotiation" Economics Letters, 28, 117-122 (1988) (with C. Kahn)
- 22. "<u>Default, Foreclosure, and Strategic Renegotiation,</u>" <u>Law and Contemporary Problems</u>, 52 No 1 (Winter 1989), 49-62 (with C. Kahn).
- 23. "Firms' Fiscal Years, Size and Industry," Economics Letters, 29, 69-76 (1989) (with S. Kandel).
- 24. "Market Efficiency and Value Line's Record," Journal of Business, 63, 187-216 (1990)(with S. Kandel).
- 25. "Dividend Neutrality with Transaction Costs," Journal of Business, 63, Supplement S93-S106 (1990).
- 26. "Arbitrage Pricing Theory" The New Palgrave Dictionary of Money and Finance, 1991.
- 27. "On the Incentives for Money Managers: A Signalling Approach" European Economic Review, 37, 1065-1082 (1993) (with S. Kandel).
- 28. "The Desirability of Investment in Commodities Via Commodity Futures" <u>Derivatives Quarterly</u> 65-67 (Fall 1995).
- 29. "Corporate Risk Management to Reduce Borrowing Costs" Economics Letters, 54 (1997) 265-69.
- 30. "<u>MarketNet: Market-Based Protection of Information Systems</u>," with Yemini, Dalianas and Florissi, <u>Proceedings of the First International Conference on Information and Computation Economies</u>, October 25-28, 1999, Charleston, South Carolina, ACM Press.
- 31. "<u>MarketNet: Protecting Access to Information Systems Through Financial Markets Controls</u>," with Yemini, Dalianas and Florissi, <u>Decision Support Systems special issue on Information and Computation Economies</u>, 2000, 28/1-2, 205-216.
- 32. "Home Bias in Equity Markets: International and Intranational Evidence," Intranational Macroeconomics, Hess, Gregory D., and Eric van Wincoop, editors, Cambridge University Press, 2000, 76-91.
- 33. <u>"Contagious Speculation and a Cure for Cancer: A Non-Event that Made Stock Prices Soar,"</u> with Tomer Regev, <u>Journal of Finance</u> Vol. 56, No.1, February 2001, 387-396, reprinted in <u>The Psychology of World Equity Markets</u> vol II, Werner De Bondt, editor, Edward Elgar 2005, 291-300.
- 34. "Systematic Liquidity," with Dominika Halka, <u>Journal of Financial Research</u>, Spring 2001, Vol. 24, No. 2, pp. 161-178. Selected Outstanding *JFR* Article for 2001
- 35. <u>"Familiarity Breeds Investment,"</u> Review of Financial Studies, Fall 2001, Vol. 14, No. 3, pp 659-680; reprinted in <u>The Psychology of World Equity Markets</u> vol I, Werner De Bondt, editor, Edward Elgar 2005, 474-495.
- 36. "Behavioral Finance and Markets," Cognitive Processes and Economic Behaviour, Dimitri, Nicola, Marcello Basili and Itzhak Gilboa, editors, Routledge 2003, 1-14.
- 37. <u>"Price Manipulation and Quasi-Arbitrage,"</u> with Werner Stanzl, <u>Econometrica</u>, July 2004, Vol. 74 No. 4, 1247-1276.
- 38. "Performance and Employer Stock in 401(k) Plans," with Paul Sengmueller, Review of Finance, Vol. 8, No.3, September 2004, 403-443.

- 39. "Do Stock Price Bubbles Influence Corporate Investment?" with Simon Gilchrist and Charles Himmelberg, Journal of Monetary Economics, 52 (4), 805-827 (May 2005).
- 40. "How much choice is too much: Determinants of individual contributions in 401K retirement plans," with Iyengar, S.S., and Jiang, W. In Mitchell, O.S. & Utkus, S.P (Eds.) Pension Design and Structure: New Lessons From Behavioral Finance. Oxford: Oxford University Press, 2004, pages 83-96.
- 41. "Optimal Liquidity Trading," with Werner Stanzl, Review of Finance, 9, 165-200 (2005).
- 42. "Offering vs. Choice in 401(k) Plans: Equity Exposure and Number of Funds," with Wei Jiang, Journal of Finance, 61 (2) 763-801 (April 2006); winner, Distinguished Paper award of the Smith-Breeden Prize.
- 43. <u>"Talk and Action: What Individual Investors Say and What They Do"</u> with Daniel Dorn <u>Review of Finance</u>, 9, 437-481 (2005).
- 44. <u>"Arbitrage Pricing Theory,"</u> with Zhenyu Wang, an entry to <u>The New Palgrave Dictionary of Economics</u>, 2nd edition, S. N. Durlauf and L. E. Blume (eds), forthcoming, Palgrave Macmillan.
- 45. "Defined Contribution Pension Plans: Determinants of Participation and Contribution Rates," with Sheena Iyengar and Wei Jiang, <u>Journal of Financial Services Research</u>, 2007, vol. 31(1), 1-32.
- 46. "Correlated trading and returns," co-authored with Daniel Dorn and Paul Sengmueller, <u>Journal of Finance</u>, Vol. 63 (2), pp. 885-920.
- 47. "Preferred Risk Habitat of Individual Investors," with Daniel Dorn, <u>Journal of Financial Economics</u> 97 (2010), 155-173.
- 48. "What is the NPV of Expected Future Profits of Money Managers?" Rivista Bancaria Minerva Bancaria, No 1 2010, 7-37.
- 49. "Performance maximization of actively managed funds," with Paolo Guasoni and Zhenyu Wang, Journal of Financial Economics Volume 101, Issue 3, September 2011, Pages 574–595.
- 50. "Moral Hazard and Debt Maturity," with Rafael Repullo, working paper December 2013.
- 51. "Asset Pricing for the Shortfall Averse," with Paolo Guasoni, January 2017
- 52. "Monopoly without a Monopolist: An Economic Analysis of the Bitcoin Payment System," with Jacob Leshno and Ciamac Moallemi, <u>Review of Economic Studies</u>, 88 (6) November 2021, 3011-3040; originally circulated August 2017. (Summary appears as a Dec 2017 VoxEU blogpost, <u>The Economics of the Bitcoin Payment System.</u>)
- 53. "Economic Expectations, Voting, and Decisions around Elections," with Tobias Konitzer, Masha Krupenkin, David Rothschild and Shawndra Hill, <u>American Economic Review</u>, 108; 597-602 May 2018.
- 54. "An Economist's Perspective on the Bitcoin Payment System," with Jacob Leshno and Ciamac Moallemi, AEA Papers and Proceedings, 109; 93-96 May 2019.
- 55. "Shortfall Aversion," with Paolo Guasoni and Dan Ren, Mathematical Finance, Volume 20 (3), 869-920, 2020.
- 56. "Lightning Network Economics: Channels," with Paolo Guasoni and Clara Shikhelman, May 2021.

Outside Activities 2011-2023

Columbia Business School requires faculty members to disclose any activities that might present a real or apparent conflict of interest. The list below complies with this requirement.

Federal Reserve Bank of New York, Academic visitor, 2011, 2012

Pensions and Investments, speaker at an event for money managers and consultants, 2012

Morgan Stanley Asset Management, speaker at a client conference, 2014

The Capital Group, presentation at an internal conference, December 2014

Speech for Made in China International, 2017

Adviser to FinTech companies, 2018

Speaker at conferences of Empirica, 2021-2022