# CURRICULUM VITAE Edi Karni, Ph.D.

# Scott and Barbara Black Professor of Economics

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### **EDUCATION**

B.A., Economics and Political Science, Hebrew University of Jerusalem, 1965

M.A. (Honors) Economics, Hebrew University of Jerusalem, 1970

M.A. Economics, University of Chicago, 1971

Ph.D. Economics, University of Chicago, 1971

# PROFESSIONAL EXPERIENCE

Part-Time Lecturer, University of Chicago, 1970

Visiting Assistant Professor of Economics, Ohio State University, 1971–72

Visiting Associate Professor of Economics, Ohio State University, Summers 1973–76

Lecturer (1972), Senior Lecturer (1973), Associate Professor (1977), Professor (1984), Tel-Aviv University

Fellow, Institute for Advanced Studies, Hebrew University of Jerusalem, 1976–77

Visiting Professor, Graduate School of Business, University of Chicago, 1977–79

Visiting Professor, Department of Economics, Johns Hopkins University, 1980

Distinguished Research Environment Professor, Warwick Business School, Warwick University, UK 2013 – 2019.

Professor, Department of Economics, Johns Hopkins University, 1981–present

Distinguished Visiting Professor, Department of Economics, Vanderbilt University, May 1987

Visiting Professor, Department of Economics, Tel Aviv University, 1987–88

Visiting Professor, School of Mathematical Sciences, Tel Aviv University, January 1991

Visiting Professor, Department of Economics, Haifa University, June 1991

Visiting Professor, Department of Economics, University of Montreal, March, 1993

Visiting Professor, Department of Economics, Tel Aviv University, January 1994

Visiting Professor, Department of Economics, Tel Aviv University, January 1995

Visiting Professor, Department of Economics, University of Montreal, March 1995

Visiting Professor, Université Pierre et Marie Curie (Paris VI), May–June, 1995

Visiting Professor, Department of Economics, Tel Aviv University, January 1996

Visiting Professor, Faculty of Management, Tel Aviv University, May 1997

Visiting Professor, Université Pantheon-Assas (Paris II), June 1997

Visiting Professor, Department of Economics, Tel Aviv University, December 1997–January 1998

Visiting Professor, Université Sorbonne-Pantheon (Paris I), June 1998

Visiting Professor, Université Cergy-Pontoise, June 1999

Visiting Professor, Berglas School of Economics, Tel Aviv University, December 2000

Visiting Professor, École Normale Superieure de Cachan, France, June 2001

Visiting Professor, Berglas School of Economics, Tel Aviv University, March–April, 2002

Visiting Professor, École Normale Superieure de Cachan, France, May–June, 2002

Visiting Professor, Université Cergy-Pontoise, June 2003

Visiting Professor, Berglas School of Economics, Tel Aviv University, January 2004

Directeur de Recherche, École Polytechenique, June 2005

Visiting Professor, The Center for Rationality and Interactive Decisions, The Hebrew University of Jerusalem, January, 2006

Visiting Professor, The Center for Rationality and Interactive Decisions, The Hebrew University of Jerusalem, January, 2007

Visiting Professor, ENSAM, France, May-June 2007

Visiting Professor, Berglas School of Economics, Tel Aviv University, January-February, 2008

Visiting Professor, LUISS University, Rome, March 2008

Visiting Professor, HEC, Paris April-June 2008

Visiting Professor, University of New South Wales, Sydney, August, 2008

Visiting Professor, HEC, Paris, January 2009

Visiting Professor, EIEF, Rome, May 2009

Visiting Professor, IAE de Sorbonne, and ESTP, Paris June-July, 2009

Weatherall Visiting Scholar, Queen's University, Kingston, Canada, March 2010

Visiting Professor, École Normale Superieure de Cachan, France, May-July, 2010

Visiting Professor, Berglas School of Economics, Tel Aviv University, December 2011-January 2012.

Visiting Professor, Manchester University, UK, May 2014

Visiting Professor, EIEF, Rome, October 2014

Visiting Professor, Berglas School of Economics, Tel Aviv University, October 2014 – January 2015

Advisory Editor, Journal of Risk and Uncertainty, 1988-91

Associate Editor, Journal of Risk and Uncertainty, 1991–present

Associate Editor, Geneva Papers on Risk and Insurance Theory, 1990-present

Member, Editorial Board, Mathematical Social Sciences, 2000–2015

Coordinating Editor, Theory and Decision, 2002–present

#### **PUBLICATIONS**

#### **BOOKS**

Decision Making Under Uncertainty: The Case of State Dependent Preferences. Harvard University Press, 1985.

# ARTICLES

- "Inflation and Real Interest: A Long Term Analysis." *Journal of Political Economy* 80 (1972), 365–374. (Reprinted in *The Intellectual Legacy of Milton Friedman*, Daniel J. Hammond, ed. Edward Elgar Publishing, Inc.)
- "Transactions Costs and the Demand for Media of Exchange." *Western Economic Journal* 11 (March 1973), 71–80.
- "Free Competition and the Optimal Amount of Fraud." (with M. R. Darby) *Journal of Law and Economics* 16 (April 1973), 67–88.
- "The Transactions Demand for Cash: Incorporation of the Value of Time into the Inventory Approach." *Journal of Political Economy* 81 (September/October 1973), 1216–1226.
- "The Value of Time and the Demand for Money." *Journal of Money, Credit and Banking* 6 (February 1974), 45–64.
- "A Consistent Estimator of the Slope in a Regression Model with Errors in Variables." (with I. Weissman) *Journal of American Statistical Association* 69 (March 1974), 211–214.
- "The Value of Time and the Demand for Money, Evidence from U.K. Time Series Data." *Australian Economic Papers* (December 1975), 231–239.
- "The Value of Time and the Demand for Money: A Rejoinder." *Journal of Monetary Economics* 2 (1975), 496–498.
- "The Utility of Money and the Transactions Demand for Cash." (with Uri Ben–Zion) *Canadian Journal of Economics* 9 (February 1976), 165–171.
- "On the Private Production of Public Goods." *Review of Social Economics* 34 (April 1976), 41–51.
- "Independence of Non-Feasible Alternatives, and Independence of Non-Optimal Alternatives." (with David Schmeidler) *Journal of Economic Theory*, 15 (June 1976), 488–493.
- "The Probability Distribution of the Duration of the Game in the Classical Ruin Problem." *Journal of Applied Probability* 14 (June 1977), 416–420.

- "Search Theory: The Case of Search with Uncertain Recall." (with Abba Schwartz) *Journal of Economic Theory* 16 (October 1977), 38–52.
- "Two Theorems on Optimal Stopping with Backward Solicitation." (with Abba Schwartz) *Journal of Applied Probability* 14 (1977), 869–875.
- "Period Analysis and Continuous Analysis in Patinkin's Macroeconomic Model." *Journal of Economic Theory* 7 (1978), 111–117.
- "Collective Rationality, Unanimity and Liberal Ethics." *Review of Economic Studies* 45 (October 1978), 571–574.
- "On the Nature and Role of the Investment Function in Macroeconomic Theory." *Journal of Monetary Economics* 4 (November 1978), 735–742.
- "On the Specification of Asset Equilibrium in Macroeconomic Models: A Note." *Journal of Political Economy* 87 (February 1979), 171–178.
- "The Israeli Economy: 1973–1976. A Survey of Recent Developments and a Review of an Old Problem." *Economic Development and Cultural Change* (October 1979), 63–76.
- "On Multivariate Risk Aversion," Econometrica 47 (November 1979), 1391–1401.
- "A Simple Test of the Short–Run Theory of the Phillips Curve." *Economic Letters* 3 (1979), 229–233.
- "A Note on Lucas' Equilibrium Model of the Business Cycle." *Journal of Political Economy* 88 (December 1980), 1231–1236.
- "Equilibrium Business Cycle Theory with Centralized Trading in Some Assets." *Economic Letters* 4 (2) (1979), 111–115.
- "Risk Aversion and Saving Behavior: Summary and Extension." *International Economic Review* 23 (February 1982), 35–42.
- "On Optimal Wage Indexation." Journal of Political Economy 91 (April 1983), 282–292.
- "On State Dependent Preferences and Subjective Probabilities." (with David Schmeidler and Karl Vind) *Econometrica* 51 (July 1983), 1021–1032.
- "On the Correspondence Between Multivariate Risk Aversion and Risk Aversion for State—Dependent Preferences." *Journal of Economic Theory* 30 (August 1983), 230–242.
- "Risk Aversion for State-Dependent Utility Functions: Measurement and Applications." *International Economic Review* 24 (October 1983),637–647.

- "Flight Insurance Pricing and the Theory of Choice." *Economic Letters* 14 (1984), 315–320.
- "Increasing Risk with State-Dependent Preferences." *Journal of Economic Theory* 35 (February 1985), 172–177.
- "Uncertain Lifetime, Risk Aversion, and Life Insurance." (with Itzhak Zilcha) *Scandinavian Actuarial Journal* (1985), 109–123.
- "Vickrey Auctions in the Theory of Expected Utility with Rank-Dependent Probabilities." (with Zvi Safra) *Economic Letters* 20 (1986), 15–18.
- "Self–Preservation as a Foundation of Rational Behavior Under Risk" (with David Schmeidler), *Journal of Economic Behavior and Organization* 7 (1986), 71–81.
- "Welfare and Comparative Statics Implications of Fair Social Security: A Steady State Analysis" (with Itzhak Zilcha) *Journal of Public Economics* 30 (1986), 341–358.
- "Risk Aversion in the Theory of Life Insurance: The Fisherian Model." (With Itzhak Zilcha) *Journal of Risk and Insurance* 53 (1986), 606–620.
- "Risk Aversion in the Theory of Expected Utility with Rank-Dependent Probabilities" (with Soo Hong Chew and Zvi Safra) *Journal of Economic Theory* 42 (1987), 370–381.
- "Generalized Expected Utility Analysis of Risk Aversion with State-Dependent Preferences." *International Economic Review* 28 (Feb.1987) 229–240.
- "Preference Reversal' and the Observability of Preferences by Experimental Methods." (with Zvi Safra) *Econometrica* 55 (1987) 675–685.
- "On the Equivalence between Descending Bid Auctions and First Price Sealed Bid Auctions." *Theory and Decision* 25 (1988) 211–217.
- "Generalized Expected Utility Analysis of Multivariate Risk Aversion." *International Economic Review* 30 (1989) 297–307.
- "Ascending Bid Auctions with Behaviorally Consistent Bidders." (with Zvi Safra) *Annals of Operations Research* 19 (1989) 435–446.
- "Dynamic Consistency, Revelations in Auctions and the Structure of Preferences." (with Zvi Safra) *Review of Economic Studies* 56 (1989) 421–433.
- "Aggregate and Distributional Effects of Social Security" (with Itzhak Zilcha) *Journal of Public Economics* 40 (1989), 37–56.

- "Fixed Preferences and Changing Tastes." (with David Schmeidler) *American Economic Review*, Papers and Proceedings, (May 1990), 262–267. (Reprinted in Martin Carter, Mark Casson, and Vivek Suneja, eds. *The Economics of Marketing*. Edward Elgar Publishing, Inc., Cheltenham, UK
- "Rank–Dependent Probabilities." (with Zvi Safra) *Economic Journal* 100 (June 1990) 487–495.
- "Behaviorally Consistent Optimal Stopping Rules." (with Zvi Safra) *Journal of Economic Theory* 51 (August 1990), 391–402.
- "Atemporal Dynamic Consistency and Expected Utility Theory." (with David Schmeidler) *Journal of Economic Theory* 54 (August 1991), 401–408.
- "Subjective Probabilities and Utility with Event–Dependent Preferences." *Journal of Risk and Uncertainty* 5 (1992), 107–125.
- "Utility Theory with Probability–Dependent Outcome Valuation." *Journal of Economic Theory* 57 (June 1992), 111–124.
- "A Definition of Subjective Probabilities with State–Dependent Preferences." *Econometrica* 61 (1993), 187–198.
- "On the Uniqueness of Subjective Probabilities." (with David Schmeidler) *Economic Theory* 3 (1993), 267–277.
- "Subjective Expected Utility Theory with State-Dependent Preferences." *Journal of Economic Theory* 60 (1993), 428–438.
- "Choquet Expected Utility with A Finite State Space: Commutativity and Act—Independence." (with Soo Hong Chew) *Journal of Economic Theory* 62 (1994), 469–479.
- "Social Attributes and Strategic Equilibrium: A Restaurant Pricing Game." (with Dan Levin) *Journal of Political Economy* 102 (1994), 822–840.
- "Unbounded Behaviorally Consistent Stopping Rules." (with Zvi Safra) *Journal of Risk and Uncertainty* 9 (1994), 231–238.
- "Technological Progress and Income Inequality." (with Itzhak Zilcha) *Economic Theory* 5 (1995), 277–294.
- "Utility Theory with Probability-Dependent Outcome Valuations: Extensions and Applications." (with Edward Schlee) *Journal of Risk and Uncertainty* 10 (1995) 127–142.

- "The Impossibility of Experimental Elicitation of Subjective Probabilities." (with Zvi Safra). *Theory and Decision* 38 (1995), 313–320.
- "Non-Expected Utility Theory and the Robustness of the Classical Insurance Paradigm: Discussion." *Geneva Papers on Risk and Insurance Theory* 20 (1995), 51–56.
- "Social Welfare Functions and Fairness." Social Choice and Welfare 13 (1996), 487–496.
- "Probabilities and Beliefs." Journal of Risk and Uncertainty 13 (1996), 249–262.
- "Political Structure, Taxes, and Trade." (with Subir Chakrabarti) *Journal of Public Economics* 64 (1997), 241–258.
- "An Informationally Parsimonious Impartial Observer Theorem." (with John Weymark) *Social Choice and Welfare* 15 (1998), 321–332.
- "Endogenous Adverse Selection and Unemployment Insurance." (with Henry Chiu) *Journal of Political Economy* 106 (1998), 806–828.
- "Impartiality: Definition and Representation." Econometrica 66 (1998), 1405–1415.
- "Hexagon Condition and Additive Representation for Two Dimensions: An Algebraic Approach." (with Zvi Safra) *Journal of Mathematical Psychology* 42 (1998), 393–399.
- "Elicitation of Subjective Probabilities when the Initial Endowment is Unobserved." (with Jean–Yves Jaffray) *Journal of Risk and Uncertainty* 18 (1999), 5–20.
- "Elicitation of Subjective Probabilities when Preferences are State—Dependent." *International Economic Review* 40 (1999), 479–486.
- "Optimal Unemployment Insurance: A Survey." *Southern Economic Journal* 66 (1999), 442–465.
- "On the Determination of Subjective Probability by Choice." (with Phillipe Mongin) *Management Science*, 46 (2000), 233–248.
- "Saving Behavior in Stationary Equilibrium with Random Discounting." (with Itzhak Zilcha) *Economic Theory* 15 (2000), 551–564.
- "An Extension of a Theorem of von Neumann and Morgenstern with Application to Social Choice Theory." (with Zvi Safra) *Journal of Mathematical Economics* (34) (2000), 315–327.
- "On the Equivalence of Preferences." (with Simon Grant) *Economics Letters* 70(3) (2001), 341–348.

- "Individual Sense of Justice: A Utility Representation." (with Zvi Safra) *Econometrica* 70 (2002), 263–284.
- "Intensity of the Sense of Fairness: Measurement and Behavioral Characterization." (with Zvi Safra) *Journal of Economic Theory* (2002), 318–337.
- "On the Representation of Beliefs by Probabilities." *Journal of Risk and Uncertainty* 26 (2003), 17–38.
- "Impartiality and Interpersonal Comparisons of Variations in Well-Being." *Social Choice and Welfare* 21 (2003), 95–111.
- "A Theory of Quantifiable Beliefs." (with Simon Grant) *Journal of Mathematical Economics*, 40 (2004), 515-546.
- "Additive Representations over Actions and Acts." *Mathematical Social Sciences*, 48 (2004), 113-119.
- "Subjective Expected Utility Theory with Costly Actions." *Games and Economic Behavior*, 50 (2005), 28-41.
- "Why Does It Matter that Beliefs and Valuations be Correctly Represented?" (with Simon Grant) *International Economic Review*, 46 (2005), 917-934.
- "Subjective Expected Utility Theory without States of the World." *Journal of Mathematical Economics*, 42 (2006), 325 342.
- "Foundations of Bayesian Theory." Journal of Economic Theory, 132 (2007), 167 188.
- "A New Approach to Modeling Decision-Making under Uncertainty and Defining Subjective Probabilities." *Economic Theory*, 33 (2007), 225 242.
- "Individual and Group Decision Making Under Risk: An Experimental Study of Bayesian Updating and Violations of First-order Stochastic Dominance." (with Gary Charness and Dan Levin) *Journal of Risk and Uncertainty*, 35 (2007) 129-148.
- "Archimedean and Continuity." *Mathematical Social Sciences*, 53 (2007) 332-334.
- "Individual Sense of Fairness: An Experimental Study." (with Timothy Salmon and Barry Sopher) *Experimental Economics* 11 (2008) 174-189.
- "Moral Sentiments and Social Choice." (with Zvi Safra) *Social Choice and Welfare*, 30 (2008) 427-446.
- "Unknowable States and Choice-Based Definitions of Subjective Probabilities." *Economics Letters* 99/3 (2008) 534-536.

- "On Optimal Insurance in the Presence of Moral Hazard." EGRIE Keynote address *The Geneva Risk and Insurance Review*, 33 (2008) 1-18.
- "Agency Theory: Choice-Based Behavioral Foundations of the Parameterized Distribution Formulation." *Economic Theory*, 36 (2008) 337-351.
- "A Reformulation of Maxmin Expected Utility Model with Application to Agency Theory." *Journal of Mathematical Economics* 45 (2009), 97 112.
- "A Mechanism for Eliciting Probabilities." Econometrica 77 (2009), 603-606.
- "A Theory of Medical Decision Making." *Journal of Risk and Uncertainty* 39 (2009), 1-16.
- "On the Conjunction Fallacy in Probability Judgment: New Experimental Evidence Regarding Linda," (with G. Charness and D. Levin) *Games and Economic Behavior* 68 (2010) 551-556.
- "A Mechanism for Thawing the Credit Markets." *Review of Economic Design*, 14 (2010) 243-
- "Red Herrings: Some Thoughts on the Meaning of Zero-Probability Events and Mathematical Modeling." *Economic Letters* 107 (2010) 134-135.
- "Continuity, Completeness, and the Definition of Weak Preferences." *Mathematical Social Sciences* 62 (2011) 123-125.
- "A Theory of Bayesian Decision Making with Action-Dependent Subjective Probabilities." *Economic Theory* 48 (2011) 125-146.
- "Subjective Probabilities on a State-Space." *American Economic Journal Microeconomics* 3 (2011) 172-185.
- "Expected Multi-Utility Representations." (with T. Galaabaatar) *Mathematical Social Sciences* 64 (2012) 242–246.
- "Subjective Expected Utility Theory with Incomplete Preferences," (with T. Galaabaatar) *Econometrica* 81 (2013) 255-284.
- "Ambiguity Attitudes and Social Interactions: An Experimental Investigation" (with Dan Levin and Gary Charness) *Journal of Risk and Uncertainty* 46 (2013) 1-25.
- "Bayesian Decision Theory with Action-Dependent Probabilities and Risk-Attitudes" *Economic Theory* 53 (2013) 335-356.

- "Reverse Bayesianism': A Choice-Based Theory of Growing Awareness," (with Marie-Louise Vierø) *American Economic Review* 103 (2013) 2790-2810.
- "Familiarity Breeds Completeness" *Economic Theory* 56 (2014) 109-124.
- "Helping Patients and Physicians Reach Individualized Medical Decisions: Theory and Application to Prenatal Diagnostic Testing," (with Moshe Leshno and Sivan Rapaport) *Theory and Decision* 76 (2014) 451-467.
- "Probabilistic Sophistication and Reverse Bayesianism." (with Marie-Louise Vierø) *Journal of Risk and Uncertainty*, 50 (2015) 189-208
- "Continuity, Completeness, Betweenness and Cone-Monotonicity," (with Zvi Safra) *Mathematical Social Sciences* 74, (2015) 68–72
- "A Theory of Stochastic Choice under Uncertainty." (with Zvi Safra) *Journal of Mathematical Economics* 63, (2016) 164-173
- "An Expected Utility Theory for State-Dependent Preferences." (with David Schmeidler) *Theory and Decision* 81, (2016) 467-478.
- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." (with Marie-Louise Vierø) *Journal of Economic Theory* 168, (2017) 301–328.
- "States of Nature and the Nature of States." *Economics and Philosophy* 33 (2017) 73-90.
- "A Mechanism for Eliciting Second-Order Beliefs and Inclination to Choose." *American Economic Journal, Microeconomics* 10 (2018) 275-285.
- "A Mechanism for the Elicitation of Second-Order Beliefs and Subjective Information Structures." *Economic Theory*, 69 (2020) 217-232.
- "Probabilistically Sophisticated Choice: An Alternative Axiomatization," *Revue Economique* 71 (2020) 307-312.
- ""Reverse Bayesianism": A Clarification and Generalization." (with Marie-Louise Viero and Quitze Valenzuela-Stookey). *The B.E. Journal of Theoretical Economics* (2020) 20180176
- "Probabilistic Sophistication without Completeness," *Journal of Mathematical Economics* 83 (2020), 8-13.
- "On the Indeterminacy of the Representation of Beliefs by Probabilities," *Economics Letters* 196 (2020), 109535
- "Competitive Equilibrium Fraud in the Markets for Credence-Goods," (with Yen-Lin Chiu) *Journal of Mathematical Economics* 96 (2021).

- "Weighted Utility Theory with Incomplete Preferences." (with Nan Zhou) *Mathematical Social Sciences* 113 (2021), 116-136.%
- "Incomplete Risk Attitudes and Random Choice Behavior: An Elicitation Mechanism." *Theory and Decisions* (2021).
- "A Theory-Based Decision Model," Journal of Economic Theory 201 (2022).
- "Hybrid Decision Model and the Ranking of Experiments," (with Zvi Safra) *Journal of Mathematical Economics* 101, (2022),
- "Comparative Incompleteness: Measurement, Behavioral Manifestations and Elicitation," (with Marie-Louise Viero) *Journal of Economic Behavior and Organization* 205 (2022) 423-442.
- "Irresolute Choice Behavior." International Journal of Economic Theory (2023)
- "Preventive-Service Fraud in Credence Good Markets." *Economic Theory* 78, (2024) 593–617.
- "Impartiality and Relative Utilitarianism." (with John Weymark) *Social Choice and Welfare* 63 (2024), 1-18.
- "Ambiguity Aversion, Risk Aversion, and the Weight of Evidence." *Theory and Decision* (2024)

### ARTICLES IN BOOKS AND CONFERENCE VOLUMES

- "Tip' Payments and the Quality of Service" (With Uri Ben Zion) In Orley C. Ashenfelter and Wallace E. Oates, eds., *Essays in Labor Market Analysis*. New York: John Wiley & Sons, 1977, 37–45.
- "Equilibrium Business Cycle Theory with Centralized Trading in Some Assets." In June Flanders and Assaf. Razin, eds., *Development in Inflationary World*. New York: Academic Press, 1981, 233-243.
- "Risk Version in the Theory of Health Insurance." In Elhanan Helpman, Assaf Razin, and Efraim Sadka, eds., *Social Policy Evaluation: An Economic Perspective*. New York: Academic Press, 1983, 97–106.
- "Preferences Reversals' and the Theory of Decision Making under Risk." (with Zvi Safra). In Bertrand Munier, ed., *Risk, Decision, and Rationality*. D. Reidel Publishing Co. 1988, 163–172.

"Behavioral Consistency in Sequential Decisions." (With Zvi Safra) In Atila Chikan, ed., *Progress in Decision, Utility and Risk Theory*. Dordrecht: Kluwer Academic Publishers, 1991.

"Utility Theory with Uncertainty." (With David Schmeidler) In Werner Hildenbrand and Hugo Sonnenschein, eds., *Handbook of Mathematical Economics*. Vol. 4. Amsterdam: North Holland, 1991.

"Optimal Insurance: A Nonexpected Utility Analysis." In Georges Dionne, ed., *Contributions to Insurance Economics*. Boston: Kluwer Academic Publishers, 1992.

"Technological Progress and Income Inequality: A Model with Human Capital and Bequest." (With Itzhak Zilcha) In J.H. Bergstrand, T.F. Cosimano, J.W. Houck, and R.G. Sheehan, eds., *The Changing Distribution of Income in an Open U.S. Economy*. Amsterdam: North Holland, 1994

"State-Dependent Utility." In Paul Anand, Prasanta K. Pattanaik, and Clemens Puppe, eds. *Handbook of Rational and Social Choice* Oxford University Press, 2009.

Axiomatic Foundations of Expected Utility and Subjective Probability." Mark J. Machina, W. Kip Viscusi, editors, *Handbook of the Economics of Risk and Uncertainty*, Vol. 1 (2014), Oxford: North Holland.

Ambiguity and Nonexpected Utility (with Massimo Marinacci and Fabio Maccheroni) in Peyton Young and Shmuel Zamir (eds.) *Handbook of Game Theory* Vol. 4 Ch. 17 (2014) Elsevier

### **BOOK REVIEWS**

Monetary Theory and Monetary Policy in the 1970s (Proceedings of the 1970 Sheffield Money Seminar, edited by G. Clayton, J. C. Gilbert, and R. Sedgwick), Journal of Money, Credit and Banking 4 (February 1973), 224–229.

The Theory of Money, by Jurg Niehans, Journal of Political Economy 87 (February 1979), 217–220.

Nonlinear Preference and Utility Theory, by Peter C. Fishburn, SIAM Review 33 (March 1990), 176–178.

# OTHER PUBLICATIONS

"Housing Policy for New Immigrants in Israel." (In Hebrew, with Uri Ben–Zion) *Economic Quarterly* 77/78 (March 1974).

- "A Program for the Organization of Public Transportation in a Competitive Manner." (In Hebrew) *Economic Quarterly* 88/89 (April 1979), 115–121.
- "Comments on the Subject of the Efficiency of Organizing Public Transportation in a Competitive Manner." (In Hebrew) *Economic Quarterly* (April 1977).
- "Tales of Horrors from Ivory Towers." (With B.K Shapiro) (Humor), *Journal of Political Economy* 88 (February 1980), 210–212.
- "The Balance of Payments Problem: Definition and Policy." (In Hebrew) *Economic Quarterly* 103 (December 1979), 346–350.

Seven short articles on current economic problems in Israel. In Assaf Razin, ed. *Economists on Economics*. Ramot, 1985. (In Hebrew)

- "Fraud." In J. Eatwell, M. Milgate, and P. Newman, eds., *The New Palgrave: A Dictionary of Economic Theory and Doctrine*. Macmillan Press, 1987. Reprinted in *The New Palgrave Dictionary of Money and Finance*, Macmillan Press.
- "State—Dependent Preferences." In J. Eatwell, M. Milgate, and P. Newman, eds., *The New Palgrave: A Dictionary of Economic Theory and Doctrine.* Macmillan Press, 1987.
- "Preference Reversals." In J. Eatwell, M. Milgate, and P. Newman, eds., *The New Palgrave: A Dictionary of Economic Theory and Doctrine*. Macmillan Press, 1987.
- "Nonexpected Utility Theory." In J. Eatwell, M. Milgate, and P. Newman, eds., *The New Palgrave: A Dictionary of Economic Theory and Doctrine*. Macmillan Press, 1987.
- "Attitudes Towards Risk." The New Palgrave Dictionary of Economics and the Law (ed. P. Newman) The Macmillan Press (1998).

Special issue of *Games and Economic Behavior*, 50 (2005) (edited jointly with Andrew Postlewaite).

- "State-Dependent Preferences." In L. Blum and S. N. Durlauff, eds. *The New Palgrave: Dictionary of Economics*, 2nd edition, The Palgrave McMillan Press (2008)
- "Savage's Subjective Expected Utility Model." In L. Blum and S. Durlauff, eds. *The New Palgrave: Dictionary of Economics*, 2nd edition, The Palgrave McMillan Press (2008)
- "Obituary: David Schmeidler's Contributions to Decision Theory," (with Fabio Maccheroni and Massimo Marinacci) *Theory and Decision* (2022), 219–235.

#### WORKING PAPERS

- "Stochastic Choice Functions and Random Choice Behavior."
- "Decisions and Discovery."
- "Measurements of Attitudes toward Unawareness," (with Marie-Louise Viero)
- "Reputation in Credence Goods Markets."

# PAPERS PRESENTED AT CONFERENCES

- "Independence of Non–Feasible Alternatives and Independence of Non–Optimal Alternatives." Third World Congress of the Econometric Society, August 1975, Toronto.
- "Search Theory: The Case of Quasi–Recall." European Meetings of the Econometric Society, August 1976, Helsinki.
- "The Israeli Economy: 1973–1976: A Survey of Recent Developments and a Review of an Old Problem." Annual Meeting of the American Economic Association, December 1978, New York.
- "Equilibrium Business Cycle Theory with Centralized Trading in Some Assets." Pinhas Sapir Conference on "Development in an Inflationary World," June 17–19, 1979, Tel–Aviv.
- "Risk Aversion for State-Dependent Utility Functions: Measurement and Applications." Fourth World Congress of the Econometric Society, August 1980, Aix-En-Provence, France.
- "Risk Aversion in the Theory of Health Insurance." Sapir Conference on Social Policy Evaluation, December 1980, Tel-Aviv University.
- "On State-Dependent Preferences and Subjective Probabilities." Annual Meeting of the Econometric Society, December 1981, Washington, D.C.
- "Risk Aversion in the Theory of Life Insurance." Conference on Money Banking and Insurance, December 8–II, 1982, University of Karlsruhe, Germany.
- "Self–Preservation as a Foundation of Rational Behavior Under Risk." Second International Conference on the Foundations of Utility and Risk, June 5–9, 1984, Venice.
- "Preference Reversal' and the Theory of Choice Under Risk." Fifth World Congress of the Econometric Society, August 1985, Cambridge, MA.

- "'Preference Reversal' and the Observability of Preferences by Experimental Methods." Third International Conference on the Foundations of Utility and Risk, June 10–13, 1986, Aix–En–Provence, France.
- "Ascending Bid Auctions with Behaviorally Consistent Bidders." TIMS-ORSA meeting, May 1987, New Orleans.
- "Ascending Bid Auctions with Behaviorally Consistent Bidders." Fourth International Conference on the Foundations of Utility and Risk, June 5–12, 1988, Budapest.
- "Behaviorally Consistent Optimal Stopping Rules." Bo Wo 89, Bonn University Workshop in Mathematical Economics, June 19–July 14, 1989, Bonn, Germany.
- "Utility Theory under Uncertainty." Bo Wo 89, Bonn University workshop in Mathematical Economics, June–July 14, 1989, Bonn, Germany.
- "Fixed Preferences and Changing Tastes: The Economics of Fashion." Southeast Economic Theory and International Trade Conference, University of North Carolina, September, 22–24, 1989, Chapel Hill, NC.
- "Fixed Preferences and Changing Tastes." Annual meeting of the American Economic Association, December 20–30, 1989, Atlanta.
- "Technological Progress and Income Inequality." Sixth World Congress of the Econometric Society, August 1990, Barcelona.
- "Subjective Expected Utility Theory with State-Dependent Preferences." Conference on Mathematical Economics, October 28–November 3, 1990, Obervolfach, Germany.
- "Subjective Expected Utility Theory with State-Dependent Preferences." Conference on Preference, Risk, and Social Choice, June 26–July 2, 1991, University of California at Irvine.
- "Choquet Expected Utility with A Finite State Space: Commutativity and Act–Independence." Summer in Tel Aviv, July 1–August 3, Tel Aviv University.
- "Technological Progress and Income Inequality." Conference on The Changing Distribution of Income in an Open U.S. Economy, September 17–18, 1992, University of Notre Dame.
- "Technological Progress and Income Inequality." Fifteenth Annual Meeting of the Society for Economic Dynamics and Control, June 23–25, 1993, Nafplio–Peloponnese, Greece.

- "Utility Theory with Probability-Dependent Outcome Valuations: Extensions and Applications," Conference on Economics of Uncertainty. November 13–14, 1993, Johns Hopkins University, Baltimore, MD.
- "Unemployment Insurance: Endogenous Adverse Selection, Delayed–Start Policies, and the Role of the Public Sector." Twenty-First Seminar of the European Group of Risk and Insurance Economists, September 19–21, 1995, Toulouse, France.
- "Non-expected Utility Models and Insurance." Conference on Risque, Incertitude et Decision, June 12, 1995, Paris.
- "Probabilities and Beliefs." Southeastern Economic Theory and International Trade Conference, November 3–5, 1995, Southern Methodist University, Dallas.
- "Individual Sense of Justice and Social Welfare Functions." Third International Meeting of the Society for Social Choice and Welfare, June 22–25, 1996, Maastricht, The Netherlands.
- "Individual Sense of Justice and Social Welfare Functions." Annual Meeting of the Southern Economic Association, November 23–25, 1996, Washington, DC.
- "Endogenous Adverse Selection and Unemployment Insurance." Conference on Intermediation and Contracts, January 8–9, 1997, Tel Aviv University.
- "An Extension of a Theorem of von Neumann and Morgenstern with Application to Social Choice Theory." Conference on Decisions under Uncertainty, June 12–14, 1997, Chanteilly, France.
- "Individual Sense of Fairness: Axiomatization and Representation." Conference on "From Individual to Social Choice: The Non-Additive Approach," June 15–16, 1998, Paris.
- "A Theory of Quantifiable Beliefs." Conference on "Probabilités Subjectives et Rationalité de L'Action," November 7–9, 2000, Besançon, France.
- "A Theory of Quantifiable Beliefs." Plenary session at FUR X, Tenth International Conference on the Foundations and Application of Utility, Risk, and Decision Theory, May 30–June 2, 2001, Turin, Italy.
- "An Extension of a Theorem of von Neumann and Morgenstern with Application to Social Choice Theory." Conference on Economic Theory, July 2–8, 2001, Ischia, Italy.
- "On the Representation of Beliefs by Probabilities." Risk, Uncertainty and Decisions, (RUD) 2001, July 8–9, 2001, Venice.

- "Foundations of Bayesian Theory." Conference on "Probability and Ambiguity," June 10–11, 2002, Geneva.
- "Why Does it Matter that Beliefs and Valuations be Correctly Represented?" Conference on Probability and Ambiguity, June 10–11, 2002, Geneva.
- "Foundations of Bayesian Theory." The second conference on Behavioral Learning and Bounded Rationality." June 20-21, Universite de la Mediteranee, Aix-en Provence
- "Foundations of Bayesian Theory." Society of Economic Design (SED) Conference, July 6–9, 2002, New York.
- "Moral Sentiments and Social Choice: Fairness Considerations in University Admissions." Cowles Foundation Conference on the Theorems of Arrow and Harsanyi: Fifty Years Later, October 4–5, 2002, Yale University, New Haven, CT.
- "Foundations of Bayesian Theory," Risk, Uncertainty and Decisions, (RUD) 2003, July 7–9, 2003, Milan.
- "Subjective Expected Utility Theory without States of the World." Conference on Individual Decision Making, University of California, Irvine, May 7 8, 2004.
- "Subjective Expected Utility Theory without States of the World." FUR XI International Conference on the Foundations of Risk and Uncertainty, June 30 July 3, 2004, Paris.
- "Foundations of Agency Theory." Second World Congress of the Game Theory Society, July 5-9, 2004, Marseille.
- "A Model of Bargaining with Incomplete Information." Second World Congress of the Game Theory Society, July 5 9, 2004, Marseille.
- "Agency Theory with Maxmin Expected Utility Players." Cowles Foundation conference on Uncertainty in Economic Theory, October 8-10, 2004, Yale University, New Haven.
- "A New Approach to Modeling Decision-Making under Uncertainty and Defining Subjective Probabilities." Risk, Uncertainty and Decisions (RUD) 2005, June 22-24, 2005, Heidelberg.
- "Agency Theory with Maxmin Expected Utility Players." FUR 2006 International Conference on the Foundations of Risk and Uncertainty, June 23 –26, 2006, Rome.
- "Moral Sentiments and Social Choice: Fairness Considerations in University Admission" The Eighth International Meeting of the Society for Social Choice and Welfare, July13-17, 2006, Istanbul.

- "Bayesian Decision Theory and the Representation of Beliefs." Risk, Uncertainty and Decisions (RUD) 2007, June 24-26, 2007, Tel Aviv.
- "On Optimal Insurance in the Presence of Moral Hazard." The 19th Geneva Risk Economics Lecture, EGRIE 2007, September 17–19, 2007, Cologne.
- "A Theory of Bayesian Decision Making." Conference in honor of Andy Postlewaite's 65<sup>th</sup> birthday, University of Pennsylvania, Philadelphia, October 11-12, 2008.
- "A Theory of Bayesian Decision Making," The 3<sup>rd</sup> Israeli Game Theory Conference, December 28, 2009, Raanana.
- "Objective and Subjective Expected Utility with Incomplete Preferences," (with Tsogbadral Galaabaatar) D-TEA Paris, June 28-29, 2010.
- "On the Conjunction Fallacy in Probability Judgment: New Experimental Evidence Regarding Linda," (with Gary Charness and Dan Levin) D-TEA Paris, June 28-29, 2010.
- "Individual and Group Decision Making Under Risk: An Experimental Study of Bayesian Updating and Violations of First-order Stochastic Dominance." (with Gary Charness and Dan Levin) D-TEA Paris, June 28-29, 2010.
- "Objective and Subjective Expected Utility Theory with Incomplete Preferences," (with Tsogbadral Galaabaatar) RUD2010, Paris, June 30- July 2, 2010.
- "'Reverse Bayesianism: A Choice-Based Theory of Growing Awareness," RUD 2011, Turin, June 21-23, 2011
- "Helping Patients and Physicians Reach Individualized Medical Decisions: Theory and Application to Prenatal Diagnostic Testing," D-TEA Paris, June 28-30, 2011.
- "Reverse Bayesianism: A Choice-Based Theory of Growing Awareness," (with Marie-Louise Viero) Conference on Unawareness: Conceptualization and Modeling, Johns Hopkins University, October 29, 2011.
- "Reverse Bayesianism: A Choice-Based Theory of Growing Awareness," (with Marie-Louise Viero) FUR XV, Atlanta, July 1-3, 2012
- "Familiarity Breeds Completeness" D-TEA Paris, July 9-11, 2012.
- "Reverse Bayesianism: A Choice-Based Theory of Growing Awareness," (with Marie-Louise Viero) Game theory conference, SUNY, Stony Brook NY, July 17-18, 2012.
- "Ambiguity Attitudes and Social Interactions: An Experimental Investigation" Ambiguity: Theory and Experiment." Ambiguity: Theory and Experiment, CEAR, Georgia State University, September 20-21, 2012.

- "Reverse Bayesianism': A Choice-Based Theory of Growing Awareness." Conference on Risk and Social Preferences, University of Trento, Italy, October, 18-19, 2012.
- "Probabilistic Sophistication and Reverse Bayesianism." Canadian Economic Theory Conference 2013. Montreal May 10 12, 2013
- "Ambiguity Attitudes and Social Interactions: An Experimental Investigation" Ambiguity: Theory and Experiment." D-TEA, Paris, May 27-29, 2013
- "Probabilistic Sophistication and Reverse Bayesianism." RUD 2013, Paris May 29-31, 2013.
- "Subjective Expected Utility with State-Dependent Utility and Action-Dependent Probabilities." Games and Collective Decisions, The Center for the Study of Rationality, The Hebrew University, Jerusalem, June 6-9, 2013
- "The Representation of Incomplete Preferences under Uncertainty," Keynote speech, NWDTC Economics PhD Conference, University of Manchester (May 15-16, 2014)
- "Weighted Utility Theory with Incomplete Preferences: Parsimonious Representations." 2014 Manchester Economic Theory Workshop, Manchester UK (May, 22, 2014)
- "Weighted Utility Theory with Incomplete Preferences: Parsimonious Representations." RUD 2014 (Warwick, UK May 28-30)
- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." D-TEA Paris (June 2-4, 2014)
- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." FUR 2014 (Erasmus University, Rotterdam, June 30 July 2, 2014)
- "A Theory of Stochastic Choice under Uncertainty," D-TEA 2015 (Paris, May 27-29, 2015)
- "A Theory of Stochastic Choice under Uncertainty," RUD 2015 (Milan, June 1-3, 2015)

- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." RUD 2015 (Milan June 1-3, 2015)
- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." LSE conference on Decision under Severe Uncertainty (London, June 19-20, 2015)
- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." Advances in the Social Sciences (Oxford, June 25 26, 2015)
- "Awareness of Unawareness: A Theory of Decision Making in the Face of Ignorance." 2015 World Congress of the Econometric society (Montréal, Canada, Aug 17 -21, 2015)
- "A Mechanism for Eliciting Sets of Priors." D-TEA 2016 (Paris June 20-22, 2016)
- "A Mechanism for Eliciting Second-Order Beliefs and the Inclination to Choose." Conference on "Decision Making and Imprecise Beliefs" (Paris, March 17, 2017)
- "A Mechanism for Eliciting Second-Order Beliefs and Inclination to Choose." D-TEA 2017 (Paris May 29-31, 2017)
- "Incomplete Preferences: Representations and Choice Behavior." Workshop on Advances in Decision Theory in 2018 at Virginia Tech, (Blacksburg, April 6-7, 2018).
- "Probabilistic Sophistication without Completeness." Conference in honor of John Weymark, Vanderbilt University, (Nashville, April 13-14, 2019).
- "Probabilistic Sophistication without Completeness." D-TEA 2019 (Paris June 3-5, 2019).
- "Competitive Equilibrium Fraud in the Markets for Credence-Goods," The 30<sup>th</sup> International Conference on Game Theory, Stony Brook University, July 15-19, 2019.
- "Probabilistic Sophistication without Completeness." Inaugural Conference on Behavioral, Biological and Experimental Economics (BBEE), July 22-24, 2019, Chengdu, China.
- "Weighted Utility Theory with Incomplete Preferences." Inaugural Conference on Behavioral, Biological and Experimental Economics (BBEE), July 22-24, 2019, Chengdu, China.
- "Ranking of Experiments," RUD 2021, June 14 16, 2021, Minneapolis Minnesota, USA
- "Comparative Incompleteness: Measurement, Behavioral Manifestations and Elicitation," June  $14-16,\,2021,\,$  Minneapolis Minnesota, USA

- "A Theory-Based Decision Model," D-TEA 2021, June 28-July 2, 2021, Paris, France.
- "Comparative Incompleteness: Measurement, Behavioral Manifestations and Elicitation," D-TEA 2021, June 28-July 2, 2021, Paris, France.
- "A Theory-Based Decision Model," International Conference on The Mathematics of Subjective Probability, September 1- 3, 2021, Bocconi University, Milan, Italy.
- "Hybrid Decision Model and the Ranking of Experiments," International Conference on The Mathematics of Subjective Probability, September 1- 3, 2021, Bocconi University, Milan, Italy.
- "Preventive-Service Fraud in Credence Good Markets." Innsbruck Winter Summit | May 16-20, 2022
- "Incomplete Preferences and Random Choice Behavior" RUD 2022, Paris, June 30 July 2, 2022.
- "Stochastic Choice Functions and Random Choice Behavior." Aarhus Workshop on Known and Unknown Unknowns. Aarhus, Denmark July 6-7, 2023.
- "Ambiguity Aversion, Risk Aversion, and the Weight of Evidence." D-TEA 2023, Paris July 10-12, 2023.
- "Decisions and Discovery." 2ed Aarhus Workshop on Known and Unknown Unknowns. Aarhus, Denmark May 30-31, 2024.
- "Decisions and Discovery." D-TEA 2024, Paris June 17-19, 2024.

## **AWARDS AND HONORS**

NSF grant, 1984–86. "An Economic Analysis of Life Insurance, Annuities, and Social Security in an Overlapping Generations Model with Uncertain Lifetime" (with Itzhak Zilcha)

NSF grant, 1987–89. "Economic Consequences of Nonexpected Utility Theory" (with Zvi Safra)

Who's Who in Economics (Third Edition) M. Blaug ed. Edward Elgar, 1999

Fellow of the Econometric Society, 2001

NSF grant, 2003–2005. "Foundations of Bayesian Theory: Extensions and Applications."

Participant, roundtable discussion on the euro sponsored by the President of the French Senate, Fifth Rencontres Senatorial de l'Entreprise, Paris, January 27, 2004

TOW Speaker, Department of Economics, University of Iowa, 2005.

The Geneva Risk Economics Lecturer, 2007.

Weatherall Distinguished Visiting Scholar, Queen's University, Canada, 2010

Weatherall Distinguished Visiting Scholar, Queen's University, Canada, 2013

Weatherall Distinguished Visiting Scholar, Queen's University, Canada, 2018

Hallsworth visiting professor, University of Manchester, UK, 2014

Economic Theory Fellow of the Society for the Advancement of Economic Theory (SAET), 2015

Keynote speaker Workshop on Advances in Decision Theory in 2018 at Virginia Tech, April 6-7, 2018.

Keynote speaker: Summit conference on (Un)Ethical Behavior in Markets, University of Innsbruck, May 16-20, 2022

MEMBERSHIP IN PROFESSIONAL ASSOCIATIONS

**Econometric Society**