

VITA

NAME: Martin L. Weitzman

CURRENT POSITION: Professor of Economics
Harvard University

BIRTH: New York, N.Y., April 1, 1942

ADDRESS: Department of Economics
Harvard University
Littauer 313
Cambridge, MA 02138

EDUCATION: Swarthmore College
Mathematics and Physics, B.A., 1963

Stanford University
Statistics and Operations Research, M.S., 1964

Massachusetts Institute of Technology
Economics, Ph.D., 1967

ACADEMIC POSITIONS:

1967-70: Assistant Professor of Economics, Yale University
1970-72: Associate Professor of Economics, Yale University
1972-74: Associate Professor of Economics, MIT
1974-89: Professor of Economics, MIT
1986-89: Mitsui Professor, MIT
1989- Professor of Economics, Harvard University

CURRENT RESEARCH INTERESTS:

Environmental and Natural Resource Economics, Climate Change, Discounting, Economics of Catastrophes, Cost-Benefit Analysis, Comparison of Alternative Instruments for Controlling Pollution, Green Accounting, Economics of Biodiversity, Role of Uncertainty in Environmental Economics.

MEMBERSHIPS AND AWARDS:

Guggenheim Fellow, 1970-71 (spent on leave in the USSR)
Elected fellow of the Econometric Society, 1976
Elected fellow of the American Academy of Arts and Sciences, 1986
Special Award for "Publication of Enduring Quality," Association of Environmental and Resource Economists
Keynote Speaker: 2002 World Congress of Environmental Economists

Keynote Speaker: 2006 World Congress of Animal Geneticists
Keynote Speaker: 2009 IPCC (Intergovernmental Panel on Climate Change) AR5
International Scoping Meeting

PROFESSIONAL ACTIVITY:

Advisor to: The World Bank, International Monetary Fund, Agency for International Development, Canadian Parliamentary Committee on Employment, Icelandic Committee on Natural Resources, National Academy Panel on Integrated Environmental and Economic Accounting, Intergovernmental Panel on Climate Change.

Associate Editor: *Journal of Comparative Economics, Economic Letters, Journal of Japanese and International Economics, Journal of Environmental Economics and Management.*

MAJOR PUBLICATIONS (most recent first):

[“Additive Damages, Fat-Tailed Climate Dynamics, and Uncertain Discounting,”](#) *Economics*, number 2009-39 (October 28, 2009).

[“Some Basic Economics of Climate Change,”](#) in J-P Touffut (ed), *Changing Climate, Changing Economy*. Edward Elgar: 2009.

(with Christian Gollier) [“How Should the Distant Future be Discounted When Discount Rates are Uncertain?”](#) *Economic Letters*, 107(3), 350-353 (June, 2010).

[“On Modeling and Interpreting the Economics of Catastrophic Climate Change,”](#) *Review of Economics and Statistics*, 91(1), 1-19 (February, 2009).

[“A Review of The Stern Review on the Economics of Climate Change,”](#) *Journal of Economic Literature*, 45 (3), 703-724 (September, 2007).

[“Subjective Expectations and Asset-Return Puzzles,”](#) *American Economic Review*, 97(4), 1102-1130 (September, 2007).

“Trees vs. Fish, or Discrete vs. Continuous Harvesting,” in T. Aronsson, R. Axelsson and R. Brannlund (eds), *The Theory and Practice of Environmental and Resource Economics*, Edward Elgar: 2006.

“The Bose Model and National Income,” in S. Lahari and P. Maiti (eds), *Economic Theory in a Changing World*, Oxford University Press: 2005.

[“Stochastic Income and Wealth,”](#) *Japan and the World Economy*, 16 (2004) 277-301.

(with Raminan Laxminarayan) “Value of Treatment Heterogeneity for Infectious Diseases,” Chapter 3 in Laxminarayan, ed., *Battling Resistance to Antibiotics and Pesticides*. Washington,

D.C.: Resources for the Future, 2003.

Income, Wealth, and the Maximum Principle, Harvard University Press, 2003.

(with Thorvaldur Gylfason), "Icelandic Fisheries Management: Fees vs. Quotas," submitted to *Scottish Journal of Economics*.

(with Ramanan Laximanarayan) "On the Implications of Endogenous Resistance to Medications," *Journal of Health Economics*, 21 (2002) 709-718.

"[Landing Fees vs. Harvest Quotas with Uncertain Fish Stocks](#)," *Journal of Environmental Economics and Management*, 43, 325-338 (2002).

(with Geir Asheim) "Does NNP Growth Indicate Welfare Improvement?," *Economics Letters* 73 (2001) 233-239.

"A Contribution to the Theory of Welfare Accounting," *Scandinavian Journal of Economics*, March, 2001.

(with Karl-Gustaf Löfgren and Chuan-Zhong Li) "Harvesting versus Biodiversity: An Occam's Razor Version," *Environmental and Resource Economics*, March, 2001.

"[Gamma Discounting](#)," *American Economic Review*, 91(1), 260-271, March 2001.

"Economic Profitability Versus Ecological Entropy," *Quarterly Journal of Economics*, February, 2000.

"The Linearized Hamiltonian as Comprehensive NDP," *Environment and Development Economics*, February 2000.

"An 'Economics Proof' of a Separating Hyperplane Theorem," *Economics Letters*, **68** (2000).

(Co-Author) *Nature's Numbers: Expanding the National Income Accounts to Include the Environment*. National Academy Press, 1999.

"Just Keep Discounting, But..." in Portney and Weyant (eds), *Discounting and Intergenerational Equity*, Resources for the Future, 1999.

"[Pricing the Limits to Growth from Minerals Depletion](#)," *Quarterly Journal of Economics*, 114(2), 691-706, May 1999.

"[Why the Far-Distant Future Should be Discounted at its Lowest Possible Rate](#)," *Journal of Environmental Economics and Management*, vol. 36, no. 3, November 1998.

"[Recombinant Growth](#)," *Quarterly Journal of Economics*, 113(2), 331-360, May 1998.

"[The Noah's Ark Problem](#)," *Econometrica*, vol. 66, no. 6, 1279-1298, November 1998.

"On the Welfare Significance of National Product under Interest-Rate Uncertainty," *European Economic Review*, 42, Fall 1998.

- (with Andrew Metrick) "[Conflicts and Choices in Biodiversity Preservation](#)," *Journal of Economic Perspectives*, vol. 12, no. 3, Summer 1998.
- (with Karl-Gustaf Löfgren) "The Welfare Significance of Green Accounting as Taught by Parable," *Journal of Environmental Economics and Management*, January 1997.
- "Sustainability and Technical Progress," *Scandinavian Journal of Economics*, January 1997.
- (with Tomas Sjöström) "Competition and the Evolution of Efficiency," *Journal of Economic Behavior and Organization*, Winter 1996.
- "Hybridizing Growth Theory," *American Economic Review*, May 1996.
- (with Andrew Metrick) "[Patterns of Behavior in Biodiversity Preservation](#)," *Land Economics*, 72(1), 1-16, February 1996.
- "Diversity Functions," in Perrings, Holling, Maler, Jansson, and Folke, eds., *Biodiversity Loss: Theoretical and Ecological Issues*, Cambridge University Press, 1996.
- "Incentive Effects of Profit Sharing and Employee Share Ownership: Theory and Evidence," in *Trends in Business Organization*, Kiel, 1995.
- (with Chenggang Xu) "Chinese Township Village Enterprises as Vaguely Defined Cooperatives," *Journal of Comparative Economics*, May 1994.
- "On the 'Environmental' Discount Rate," *Journal of Environmental Economics and Management*, March 1994.
- "Monopolistic Competition with Endogenous Specialization," *Review of Economic Studies*, March 1994.
- "Economic Transition: Can Theory Help?," *European Economic Review*, April 1993.
- "[What to Preserve: An Application of Diversity Theory to Crane Conservation](#)," *Quarterly Journal of Economics*, 108(1), 157-183, February 1993.
- "[On Diversity](#)," *Quarterly Journal of Economics*, 107(2), 363-405, May 1992.
- "How Not to Privatize," *Revista di Politica Economica*, December 1991.
- "Price Distortion and Shortage Deformation or What Happened to the Soap?," *American Economic Review*, June 1991.
- "Reflections on Macroeconomics and Share Systems," in *Economic Journal Centenary*, Basil Blackwell, 1990.
- (with R. Sah) "A Proposal for Using Incentive Pre-Commitments in Public Enterprise Funding," *World Development*, June 1991.
- "The Promise of Profit Sharing", in W.C. Huang (ed.) *Organized Labor at the Crossroads*, in W.E. Upjohn, 1989.

(with Douglas Kruse) "Profit Sharing and Productivity," in A. Blinder (ed.) *Paying for Productivity*, Brookings, 1990.

"A Theory of Wage Dispersion and Job Market Segmentation," *Quarterly Journal of Economics*, February 1989.

"Consumer's Surplus as an Exact Approximation When Prices are Appropriately Deflated," *Quarterly Journal of Economics*, August 1988.

"Increasing Returns and the Foundations of Unemployment Theory: Rejoinder," *Economic Journal*, March 1988.

"Comments on 'Can the Share Economy Conquer Stagflation?'," *Quarterly Journal of Economics*, February 1988.

"Macroeconomic Aspects of Profit Sharing," in H.R. Nalbantian (ed.), *Incentives, Cooperation, and Risk Sharing*, Rowman and Littlefield, 1987.

"Share Arrangements and Macroeconomics," *IRRA Proceedings*, 39th Annual Meeting, 1987.

"Employment and Profit Sharing," *Administration*, vol. 35, no. 3, 1987 (special issue on The Challenge of Unemployment).

(with Richard Freeman) "Bonuses and Employment in Japan," *Journal of Japanese and International Economies*, June 1987.

The Case for Profit Sharing, London: Employment Institute, 1986.

"Macroeconomic Implications of Profit Sharing," in S. Fischer (ed.). *NBER Macroeconomics Annual*, 1986.

"Steady State Unemployment Under Profit Sharing," *Economic Journal*, March 1987.

"The Share Economy Symposium: A Reply," *Journal of Comparative Economics*, December 1986.

"Profit Sharing as Macroeconomic Policy," *American Economic Review*, May 1985.

"Increasing Returns and the Foundations of Unemployment Theory: An Explanation," *Journal of Post Keynesian Economics*, Spring 1985.

"The Simple Macroeconomics of Profit Sharing," *American Economic Review*, December 1985; reprinted in W. Beckerman (ed.), *Wage Rigidity and Unemployment*; (translated into Russian and Chinese).

The Share Economy, Harvard University Press, 1984; (translated into seven languages).

"Some Macroeconomic Implications of Alternative Compensation Systems," *Economic Journal*, December 1983.

"Contestable Markets: An Uprising in the Theory of Industry Structure: Comment," *American Economic Review*, June 1983.

"Soviet Industrial Production," in *The Soviet Economy to the Year 2000* in Bergson and Levine (eds.), Blackwell Ltd., 1983.

"On the Meaning of Comparative Factor Productivity," in P. Desai (ed.), *Marxism, Central Planning, and the Soviet Economy*, M.I.T. Press, 1983.

"Increasing Returns and the Foundations of Unemployment Theory," *Economic Journal*, December 1982.

(with Patricia Reagan) "Asymmetries in Price and Quantity Adjustments by the Competitive Industry," *Journal of Economic Theory*, August 1982.

"Sequential R&D Strategy for Synfuels," *Bell Journal of Economics*, Autumn 1981.

(with Kevin Roberts) "Funding Criteria for Research, Development, and Exploration Projects," *Econometrica*, September 1981.

"The 'Ratchet Principle' and Performance Incentives," *Bell Journal of Economics*, Spring 1980.

"Efficient Incentive Contracts," *Quarterly Journal of Economics*, June 1980.

"Technology Transfer to the USSR: An Econometric Analysis," *Journal of Comparative Economics*, June 1979.

"Optimal Search for the Best Alternative," *Econometrica*, May 1979.

(with A. Michael Spence) "Regulatory Strategies for Pollution Control," in A.N. Friedlaender (ed.), *Approaches to Controlling Air Pollution*, M.I.T. Press, 1978.

"Optimal Revenue Functions for Economic Regulation," *American Economic Review*, September 1978.

(with Michael Manove) "Aggregation for Material Balances," *Journal of Comparative Economics*, March 1978.

"Is the Price System or Rationing More Efficient in Getting a Commodity to Those Who Need it Most?" *Bell Journal of Economics*, Fall 1977.

(with Jacques Cremer) "OPEC and Monopoly Price of World Oil," *European Economic Review*, August 1976.

"The Optimal Development of Resource Pools," *Journal of Economic Theory*, June 1976.

"The New Soviet Incentive Model," *Bell Journal of Economics*, Spring 1976.

["On the Welfare Significance of National Product in a Dynamic Economy,"](#) *Quarterly Journal of Economics*, February 1976.

(with Jon S. Cohen) "A Marxian Model of Enclosures," *Journal of Development Economics*, March 1975.

"A Mathematical Model of Enclosures," in J. Los and M.W. Los (eds.), *Mathematical Models in Economics*, North Holland, 1974.

"[Prices vs. Quantities](#)," *Review of Economic Studies*, 41(4), 477-491, October 1974.

"[Free Access vs. Private Ownership as Alternative Systems for Managing Common Property](#)," *Journal of Economic Theory*, June 1974.

"Duality Theory of Convex Programming for Infinite Horizon Economic Models," *Management Science*, March 1972.

(with A.A. Petrov) "O Vozmozhnoi Zadachi Planirovaniya Narodnogo Khoziastva" (On a Possible Formulation for Planning the National Economy), *Isledovaniye Operatsii*, 1971.

(with A.C. Schmidt) "Printsip Maximuma dlya Ekonomicheskikh Protsyosov na Beskonechnom Intervale Vremeni" (The Maximum Principle for Economic Processes on an Infinite Interval of Time), *Kibernetika*, September/October 1971.

(with R.E. Davis and D.E. Kendrick) "A Branch and Bound Algorithm for Zero-One Mixed Integer Programming Problems," *Operations Research*, July-August 1971.

"Material Balances under Uncertainty," *Quarterly Journal of Economics*, May 1971.

"Shiftable vs. Non-Shiftable Capital: A Synthesis," *Econometrica*, May 1971.

"Optimal Growth with Economies of Scale in the Creation of Overhead Capital," *Review of Economic Studies*, October 1970.

"Soviet Postwar Economic Growth and Capital Labor Substitution," *American Economic Review*, September 1970.

"Iterative Multi-Level Planning with Production Targets," *Econometrica*, January 1970.

"A Model of the Demand for Money by Firms: Comment," *Quarterly Journal of Economics*, February 1968.

"On Choosing an Optimal Technology," *Management Science*, January 1967.

"Utility Analysis and Group Behavior: An Empirical Study," *Journal of Political Economy*, February 1965.