THE PHILLIPE MONASTER CENTER FOR ECONOMIC RESEARCH

ACTIVITY REPORT

1998/99

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TABLE OF CONTENTS

I.	MEMBERS OF THE CENTER AND THE STEERING COMMITTEE	3
II.	SUMMARY OF ACTIVITIES (presented by Uri Regev, Director)	4
III.	ACTIVITIES IN DETAIL: Conferences and Workshops Organized by the Center and the Department of Economics, Guests, Seminars, Contracts, Cooperation with other Institutions	5
IV.	PARTICIPATION OF MEMBERS IN CONFERENCES	11
V.	SCIENTIFIC PUBLICATIONS	14
VI.	WORKING PAPERS: Titles and recent abstracts	18
VII.	RESEARCH SUMMARIES OF MEMBERS	27
VIII.	BUDGET	30

I. MEMBERS OF THE MONASTER CENTER FOR ECONOMIC RESEARCH

MEMBERS:

Prof. Arie Arnon Prof. Tuvia Blumenthal Prof. Uri Ben-Zion Dr. Dov Chernichovsky Prof. Ezra Einy Prof. Mark Gradstein Prof. Oded Hochman Prof. Oded Hochman Dr. Todd Kaplan Dr. Todd Kaplan Dr. Yaakov Khazanov Dr. Adam Klug Prof. Israel Luski Prof. Israel Luski Prof. Abraham Mehrez Prof. Uri Regev Dr. Bradley Ruffle Dr. Aner Sela Prof. Haim Shalit Dr. Oren Sussman Prof. Avia Spivak Prof. Jimmy Weinblatt	Department of Economics, Chairman Department of Economics Department of Economics Department of the Management and Economics of Health Department of Economics Department of Economics, Director of the Center Department of Economics Department of Economics
Dr. David Wettstein	Faculty of Humanities and Social Sciences
Prof. Ehud Zuscovitch	Department of Economics Department of Economics

STEERING COMMITTEE:

Prof. Arie Arnon Prof. Uri Regev Dr. David Wettstein

II. SUMMARY OF ACTIVITIES

1998-99 was a particularly active and interesting period at the Monaster Center, especially, like last year, in respect to issues concerning the Middle East crisis. A. Arnon collaborated with the World Bank and MAS (The Palestinian Economic Research Center) in a report on the Palestinian economy. In addition, he joined the Harvard Project on Palestinian Refugees. A summary report on the findings as well as a chapter will appear in a forthcoming volume. The Center continued to sponsor a monthly seminar on the economic history of the Middle East jointly with the newly formed Department of Middle East Studies. This project brings to Beer Sheva eminent scholars from leading Israeli and international academic institutions.

Of particular interest is that the Center collaborated with the Ben-Gurion Research Center at the Sede Boker Campus in the publication of the second volume of a series of books concerned with the Declaration of the State of Israel. Department member J. Weinblatt authored the chapter entitled "Economics and Society during the Mandate, 1918-1948."

The Monaster Center continues to maintain its commitment to applied research on other issues of central interest to Israeli society and economy. Still in progress is the program on Health Economics and Policy in a Stressed Society that is implemented in collaboration with the University's Faculty of Health Sciences, led by Center member D. Chernichovsky together with an international steering committee. U. Ben-Zion carries out research and consulting on finance and options and futures, specifically in their application to the medical and industrial sectors and to banking. A. Spivak's research on pensions figures prominently in the national debate on the future of the country's pension funds. J. Weinblatt conducts extensive research on social policy issues with the Center for Social Policy Studies in Jerusalem and has served on several national committees. M. Justman and A. Spivak prepared a report on unemployment for the Ministry of Labor. U. Regev still serves on the advisory committee of the Central Bureau of Statistics and continues his research on a regional cooperation project on environment and waste management in the Jordan Valley and the Gaza Strip. This is a cooperative effort between Israel, Jordan, the Palestinian Authority and the Center for Biological Control at Ben-Gurion University.

M. Justman and E. Zuscovitch have concluded a major research project on the efficiency of subsidies to industrial R&D, on behalf of the Ministry of Finance and the Chief Scientist's Office of the Ministry of Industry and Trade. Prof. Zuscovitch continues his close scientific collaboration with colleagues at Louis Pasteur University (Strasbourg) and his research affiliation with the French National Center of Scientific Research (C.N.R.S). He also participates in the activities of the European Doctoral Program in the Economies of Technical Change (ETTC).

The applied work described above is complemented by theoretical research in mathematical economics and game theory by E. Einy, mechanism design by D. Wettstein, industrial organization by I. Luski, D. Wettstein, and T. Kaplan, urban economics by O. Hochman, pest management and environmental economics by U. Regev, public choice by M. Gradstein, the political economy of education, inequality and growth by M. Gradstein and M. Justman, and financial theory by H. Shalit and O. Sussman. A. Klug continues his empirical research project on the business expectations of the railroad industry in the U.S. during the Great Depression and T. Blumenthal remains active in his work on Japan's economy. B. Ruffle's current research projects include the application of experimental methods to investigate the role of buyers in different market institutions. Dr. Ruffle has also begun to organize a project to create an experimental economics research and teaching laboratory at the Center. Y.

Khazanov, who specializes in macroeconomics, gears his current research toward an in-depth analysis of the impact of economic growth on nationalist movements. A. Sela's scientific interests concern auctions and industrial organization.

The Center has also made a significant contribution to the infrastructure of services that facilitates research activity. Taking advantage of the outstanding abilities of the department's two computer experts, R. Massad and D. Grishchenko, it supports the complex computer network and other computer services in the Center and in the Department.

Finally, I wish to thank our administrative coordinator, Ms. Ella Ginzburg, and our English secretary, Ms. Estelle Schulgasser, for their devoted services to the Center and for their help in producing this report.

Professor Uri Regev, Director Monaster Center for Economic Research

III. ACTIVITIES IN DETAIL

1) Conferences and workshops organized under the auspices of the Center and the Department of Economics

<u>January 7, 1999</u>: A Workshop in Economic History organized by department member A. Klug took place at the Economics Department. Lecturers from leading universities in both Israel and abroad gave the following presentations:

"The Biological Standard of Living and Modern Economic Growth" (John Komlos, University of Munich)

"American Business Cycles: An Essay in Economic Historiography" (Peter Temin, MIT)

"The Middle East and Europe: Problems of Writing a Comparative Economic History" (Paul Rivlin, Dayan Center, Tel-Aviv University)

"Suez and Sterling, 1956" (Adam Klug, Ben-Gurion University)

"The Standardization of Track Gauge on North American Railways: 1830-1890" (Douglas Puffert, University of Munich)

"Atomic Energy and Applications of Early Models of Technical Change in Economics: 1946-54" (Warren Young, Bar-Ilan University)

"Industrial Revolution, Political Transition and the Subsequent Decline in Inequality in 19th Century Britain" (Moshe Justman, Ben-Gurion University)

<u>June 16-17, 1999</u>: The Department of Economics at Ben-Gurion University together with the Department of Economics and Falk Institute at Hebrew University sponsored an International Symposium entitled "Towards an R&D Strategy for Israel." The Symposium was initiated by. Morris Teubal (Hebrew University) and department member. Ehud Zuscovitch and the actual planning was done by Richard Nelson (Columbia f University) and department member.

Moshe Justman. The following talks were presented:

Opening Lecture: "The R&D Policy Challenge Facing Israel" (Orna Berry, Chief Scientist, Ministry of Industry and Trade)

"Sectoral Innovation Systems: Theory and Illustrations from the Italian Industrial District" (Franco Malerba, CESPRI – Bocconi University, Milan)

"Clusters, a Working Definition" (Sanjaya Lall, Oxford University)

"Links between Suppliers of Technology, Banks and Enterprises in the Restructuring of European Industry" (C. Bartzokas, UNU-INTEC, Maastricht)

"Mechanisms for Supplying Industry-Specific Public Goods in Industrial Clusters" (Dominique Foray, University of Paris XII)

"Biotechnology Options in Israel" (Martin Becker, CEO, XTL)

"Research Policy for Biotechnology in Europe" (Jacky Senker, SPRU, UK)

"Factors Behind and Issues Raised by the Increase in Patenting and Licensing by US Universities" (Richard Nelson, Columbia University)

"Evolution of Patent and Licensing Policies and Possible Implications for Basic Research at Universities" (David Mowery, UC Berkeley)

"Academic-Industry Links and Institutional Convergence" (Luke Georghiou, PREST, University of Manchester)

"The Telem and Bikura 'Targeted Programs" (Meir Zadok, Israel Academy of Sciences)

"Proposal for a National Council for Research and Development" (Alex Kenan)

"Technical Transfer in Academia" (Arnon Bentur, The Samuel Neaman Institute at the Technion)

"Achieving Critical Mass for Israeli IT Companies" (Joshua Piasetzky, ECI-Telecom)

"Incumbents, New Entrants, R&D and the Dynamics of the New Telecoms Industry" (J. Fransman, University of Edinburgh)

"The Internationalization of UK and German Start-Up Companies: Report on a Study of 500 Companies" (Oliver Burgel, University of Warwick)

"The Creation of Yozman and its Contribution to the Development of Venture Capital and High Tech in Israel during the 90s" (Yigal Ehrlich, CEO, Yozma)

"BIRD and the Globalization of Israeli High Tech" (A.I. Mlavsky, CEO, Gemini)

"The Role of Technology Incubators in the Spurt of Hi-Tech Entrepreneurship in Israel during the 90s" (Rina Pridor, Technology Incubators Program)

"Analytical Frameworks for Building Technological Capabilities" (Linsu Kim, Korea University)

"The Finnish Model of Innovation Policy" (Tarmo Lemola, VTT, Finland)

"Towards Evolutionary Systems-Oriented Research and Innovation Policies: The EU Experience" (Paraskevas Caracostas, DG 12, CEC)

"A Structuralist-Evolutionary Approach to Technology Policy" (Richard Lipsey, Simon-Fraser University, Canada)

2) Guests of the Center and the Department of Economics

Support from the Center allows us to invite economists from abroad:

- 11/98 Bill Ethier, University of Pennsylvania
- 12/98 Seth Weissman, Wellesley College, U.S.A.
- 12/98 Xiangkang Yin, La Trobe University Australia
- 3/99 Nigel Harvey, Department of Psychology, University College of London
- 4/99 Steven Brams, New York University
- 4/99 Ramanan Laxminarayan, University of Washington
- 5/99 Mark R. Rosenzweig, University of Pennsylvania
- 5/99 Michael Kaganovich, University of Indiana
- 6/99 Michael Sherraden, University of Michigan
- 6/99 Yoram Halevy, University of Pennsylvania
- 6/99 Eli Katz, York University
- 6/99 Shlomo Weber, SMU

3) Seminar Lectures Presented by Guests from Israel and Abroad

- 5.11.98 Gil Epstein and Shmuel Nitzan, Bar-Ilan University
 "A Reexamination of Monopoly Price Determination A New Political-Economy Perspective"
- 12.11.98 Bill Ethier, University of Pennsylvania "Reciprocity, Nondiscrimination, and a Multilateral World"
- 19.11.98 Aner Sela, Ben-Gurion University "Fictitious Play"
- 3.12.98 Yaakov Khazanov, Ben-Gurion University "The Economics of Nationalism and Ethnicity"
- 17.12.98 Tomer Blomkin, Tel-Aviv University

"On Search, Diffusion and Optimal Taxation"

- 24.12.98 Seth Weissman, Wellesley College, U.S.A."Hillel's Prosbol and the Growth of Social Anonymity: The Abolition of Debt Forgiveness in Jewish Law During the First Century CE"
- 31.12.98 Xiangkang Yin, La Trobe University Australia and Ehud Zuscovitch, Ben-Gurion University
 "Interaction of Drastic and Incremental Innovations: Economic Development through Schumpeterian Waves"
- 14.1.99 Avner Ahitov, Hebrew University"The Structure of Employment and Earning: Evidence from Israel"
- 21.1.99 Yacov Tsur, Department of Agricultural Economics and Management, Hebrew University "Regulator of Intertemporal Public Projects"
- 28.1.99 Hans Krogh Hvide, Norwegian School of Economics and Business and Tel-Aviv University "Signaling and Self-Insight in the Job Market"
- 11.2.99 Daniel Gottlieb, World Bank "Macroeconomic Policy"

<u>Nigel Harvey, Department of Psychology, University College of London</u> presented the following seminar lectures:

- 23.3.99 "Transferable Skills: Policy-Driven Psychology?"
- 24.3.99 "Using Advice and Assessing its Quality"
- 25.3.99 "Looking to the Future; Judgment in Forecasting"
- 25.3.99 Arieh Avishur and Yigal Tsoref, Department of Business

Administration, Ben-Gurion University

"On the Predictability of Kibbutz Financial Distress: A Principal Component Analysis with Bootstrap Confidence Intervals"

- 15.4.99 Avi Simhon, Hebrew University "Assessing Miracles Using Revealed TFP Superiority"
- 22.4.99 Ido Erev, Technion"On the Effect of Experience on Decision Making Under Uncertainty: Loss Aversion without Reflection and the Reversed Certainty (Allays) Effect"
- 26.4.99 Steven Brams, New York University "Fallback Bargaining"

29.4.99	Ramanan Laxminarayan, University of Washington
	"Economics of Antibiotic Resistance: A Theory of Optimal Use"

- 6.5.99 Hillel Rapoport, Bar-Ilan University"Brain Drain and Economic Growth: Theory and Evidence"
- 13.5.99 Arthur Fishman, University of Haifa "It Takes Time to Build a Reputation"
- 27.5.99 Mark R. Rosenzweig, University of Pennsylvania "Missing Women, the Marriage Market and Economic Growth"
- 31.5.99 Michael Kaganovich, University of Indiana"Income Distribution Effects of Public Education and Social Security in a Growing Economy"
- 7.6.99 Michael Sherraden, University of Michigan"Saving in Low-Income Households: Theory, Evidence, and Implications for Public Policy"
- 7.6.99 Yoram Halevy, University of Pennsylvania"A Bayesian Approach to Uncertainty Aversion"
- 14.6.99 Eli Katz, York University "Signaling and the Free Rider Problem: The Case of the Paradox of Voting"
- 17.6.99 Shlomo Weber, SMU "Desirability and Sustainability of Cooperation: How to Prevent a Secession"
- 21.6.99 Barry O'Neill, Hebrew University "Prestige and Nuclear Proliferation, A Game Theory Analysis"
- 24.6.99 Doron Sonsino, Technion"On Rationality, Learning and Speculations: A Comparative Study of the No-Betting Conjecture"

4) Research Contracts and Fellowships

E. Zuscovitch completed his collaboration in a research project on networks initiated by France Telecom. The study resulted in a book to be published by Springer-Verlag. Also recently completed was a research project on R&D awarded by the Ministry of Finance and the Chief Scientist of the Ministry of Industry and Trade to E. Zuscovitch and M. Justman. The study assessed Israel's R&D expenditure in terms of its contribution to growth, employment, and international trade. A report was recently published. At present, Prof. Zuscovitch participates in a European research program recently initiated by the European Union regarding the codification of knowledge in relation to technological innovation. In addition, he serves as a member of a small team of international experts involved in evaluating the different characteristics and performances of TSER (targeted socioeconomic research) on behalf of DGXII of the European Commission.

B. Ruffle continues to hold a grant from the Russell Sage Foundation's program in Behavioral Economics for his research study "Buyer Behavior in Experimental Markets." He recently also received a grant together with Richard Sosis (University of Connecticut, Department of Anthropology) from the Pinhas Sapir Center for Development to study cooperation and intragroup trust within religious and secular kibbutzim.

O. Sussman was awarded the title of TMR Fellow at the London Business School and U. Regev continues his joint work with J. Margalit and J. Safi (head of the Environmental Research Institute in Gaza) on a project for regional cooperation.

A. Spivak is presently working on a World Bank project for pension reform and on the annuity market in Israel and is also participating in the Falk Institute Project in Honor of Michael Bruno on pension reform in Israel.

5) Cooperation with Other Institutions in Israel and Abroad

Many of the members of the Center collaborate on a regular basis with investigators from various research centers and academic institutions in Israel and abroad.

A. Sela is engaged in joint research with B. Moldovanu (Mannheim University) and D. Herreiner (Bonn University). During this 1998-1999 academic year, O. Sussman is visting the London Business School. A. Spivak spent last year as a visiting professor at the Department of Finance at the University of Rutgers Business School. Since 1997 he is Chairman of the Finance Ministry Committee on the Licensing and Training of Insurance Agents and at present serves as Director of Bank Otzar Hahayal. Prof. Spivak also collaborates with the Bank of Israel in his research on Israel's pension systems, and carries out collaborative research with O. Palmon on models of adverse selection in the annuity market. B. Ruffle collaborates on experimental projects with B. Wilson (University of Arizona) on the role of buyers in different market structures, with J. Warnick (University of Pittsburgh) on inferring buyer and seller strategies from data in experimental posted-offer markets, and with R. Sosis (University of Connecticut) on intra-group trust within religious and secular kibbutzim. He also collaborates with O. Hochman and D. Pines from Tel-Aviv University on regional and urban economics. Prof. Hochman is also collaborating with G. Rausser from the University of California at Berkeley on zoning and pollution research.

E. Zuscovitch does collaborative research with the Jerusalem Institute for Israeli Studies in the areas of technological innovation, infrastructure, and growth in Israel; with BETA at Louis Pasteur University of Strasbourg; and with the European Network in the economics of technology and innovation and its affiliated European institutes (MERIT - Limburg University in the Netherlands, the Department of Economics of the University of Rome and SPRU - University of Sussex). E. Einy periodically visits the Department of Economics at the

Universidad Carlos III de Madrid as a teaching and research professor. O. Sussman is engaged in joint research with J. Suarez (CEMFI Madrid), J. Franks (London Business School), and C. Mayer (Oxford University).

U. Regev continues his collaboration with A.P. Gutierrez at University of California at Berkeley on biological economic foundations of renewable resource exploitation. This research yielded a paper that was published in Ecological Economics during 1998.

J. Weinblatt collaborates with the Center for Social Policy Studies in Jerusalem on social policy. M. Justman is engaged in joint research with a colleague at CORE, Louvain-la-Neuve, Belgium. He sits on the Council of the Israel Economics Association and is also part of a large team preparing a development plan for the Beer Sheva metropolitan area.

The Monaster Center has also joined with the Universities of Athens, Bristol, Cyprus and the Hebrew University in a special training project under the European Community's Med-Campus program. We aim to extend our participation in this program in a new collaboration with the Middle East Technical University of Ankara, and the Universities of Liverpool, Picardie and Montpellier.

IV. PARTICIPATION OF MEMBERS OF THE CENTER IN CONFERENCES AND PAPERS PRESENTED

Arie Arnon

"The Past, Present and Future Regional Trade Regime: An Israeli/Palestinian Perspective," *Water and Food Security in the Middle East*, Nicosia, Cyprus, April 1998.

"The Palestinian Economy Before and After the Paris Protocol," Israeli Economic Association, Jerusalem, Israel, May 1998.

"Expectations versus Realization: Labor Flows, Private Investment and Infrastructure," A Conference on *The Palestinian Economy After the Paris Protocol*, Ben Gurion University, Beer Sheva, Israel, June 1998.

"Sovereignty and Borders Fifty Years to Israel," Hebrew University Jerusalem, December 1998.

"The Israeli and Palestinian Economies: Between Interim and Permanent Arrangements," Israeli Economic Association - Mini Conference, June 1999.

Uri Ben-Zion

"Portfolio Composition Choice: An Experimental Approach" (with Y. Yagil), Midwest Finance Association, Chicago, March 1998.

Tuvia Blumenthal

15th Conference of the Euro-Asia Management Studies Association, Taipei, October 19-21, 1998.

Ezra Einy

"Equivalence of Value and Competitive Allocations in Large Exchange Economies with Differential Information," Workshop on Non-Atomic Games, SUNY Stony Brook, July 1998.

"Fine Value Allocations in Large Exchange Economies with Differential Information," International Conference on Game Theory and Economic Theory, SUNY Stony Brook, July 1999.

Mark Gradstein

European Economic Association Meetings, Spain, 1999

Oded Hochman

International Regional Science Association Meetings (with D. Pines), Sante Fe, New Mexico, November 1998.

Moshe Justman

"Public Education, Social Capital and Growth" (with M. Gradstein), European Economics Association Meetings, Santiago de Compostela, Spain, 1999.

"Israel's Changing Industrial Structure, 1985-98," Israel Economics Association Meetings, Jerusalem, 1999.

"Quantifying the Benefits of Israel's Industrial R&D Subsidy Program, 1986-94," Chief Scientist's Conference, Tel-Aviv, 1999.

"Industrial Revolution, Political Transition, and the Subsequent Decline in Inequality in Nineteenth-Century Britain" (with M. Gradstein), Economic History Society, Israeli Chapter, Founding Meeting, Beer Sheva.

Todd Kaplan

"Innovative Activity and Sunk Costs," (with I. Luski and D. Wettstein), 1) 25th Annual EARIE Conference (August 1998), Copenhagen, Denmark; 2) International Conference in Game Theory (July 1998), Stony Book, N.Y; 3) 12th Italian Conference on Game Theory and Applications (June 1998) Genova, Italy; 4) Third Spanish Meeting on Game Theory (June 1998) Barcelona, Spain.

"The Strategic Use of Seller Information in Private Value Auctions(Plenary)," 12th Italian Conference on Game Theory and Applications (June 1998) Genova, Italy. "Government Policy towards Multinational Corporations," International Conference on Entrepreneur and Entrepreneurship at the Dawn of the 21st Century (May 1998) Athens, Greece.

Adam Klug

International Workshop on Elites, Minorities and Economic Growth, Bar-Ilan, June 1998.

Israel Luski

"R&D Activity in a General Equilibrium Setting: A Lindahlian Perspective," Public Choice Society and Economic Science Meetings, New Orleans, Louisiana, March 1998.

"Government Policy Towards Multi-National Enterprises" (with T. Kaplan and D. Wettstein), International Conference on Entrepreneur and Entrepreneurship at the Dawn of the 21st Century, Athens, Greece, May 1998.

"Sunk Research Investments in Patent Races" (with T. Kaplan and D. Wettstein), presented at the 1) Third Spanish Meeting on Game Theory in Barcelona, Spain, June 1998; 2) the International Conference on Game Theory, Stony Brook, New York, July 1998; 3) 25th Annual Conference of the European Association for Research in Industrial Economics, Copenhagen, Denmark, August 1998.

Uri Regev

"A Bio-Economic Paradigm of IPM" (with A.P.Gutierrez). XIV International Plant Protection Congress, Jerusalem, July 1999, Session Chair, Sociological, Economic and Technological Aspects in IPM.

"Regional Cooperation on Pest Management: An Economic Perspective" (with J. Safi, Environmental Protection and Research Institute, Gaza). The Palestinian Economy After the Paris Economic Protocol, Beer Sheva, June 1998.

"Insect Vector Control in Gaza and Israel, Economic Analysis and Application" (with J. Safi, Environmental Protection and Research Institute, Gaza), Water and Food Security in the Middle East, Nicosia, Cyprus, April, 1998.

Bradley Ruffle

"The Self-Serving Bias and Beliefs about Rationality" (with T. Kaplan), presented at a) Economic Science Association meetings (May 1999), Lake Tahole, USA; b) International Conference on Social Dilemmas (July 1999), Zichron Yaakov, Israel; and c) Russel Sage Foundation, Behavioral Economics Reunion (August 1999), UC Berkeley.

Aner Sela

International Conference on Game Theory and Economy Theory, SUNY at Stony Brook, New York, July 1999.

EARIE-European Association of Research in Industrial Economics, Turin, Italy, September 1999.

Haim Shalit

"Estimating Beta," presented at 1) International Symposium on Forecasting, Edinburgh, June 1998; 2) French Finance Association Conference, Lille, July 1998.

David Wettstein

"Government Policy Towards Multinational Corporations" (with T. Kaplan and I. Luski), The 13th Conference on Game Theory and Applications, Bologna, Italy, 1999.

"Innovative Activity and Sunk Costs" (with T. Kaplan and I. Luski), International Conference on Game Theory, Stony Brook, New York, 1999.

"Government Policy Towards Multinational Corporations" (with T. Kaplan and I. Luski), The Conference of the European Association for Research in Industrial Economies, Turin, Italy, 1999.

V. SCIENTIFIC PUBLICATIONS, 1998-9 (names of Center members appear in capital letters)

ARNON, A and SPIVAK, A. (1999) "Free (and Not So Free) Banking Theories Among the Classicals or Classical Forerunners of Free Banking and Why They Have Been Neglected," *History of Political Economy* 31(1):79-107.

ARNON, A. (1999) "The Links Between the Israeli and Palestinian Economies Since 1967: Between Imposed Integration and Voluntary Separation," in: H. Gordon (ed.) *Looking Back at the Six Day War*, Praeger.

ARNON, A. and WEINBLATT, J. (1998) "Linder's Hypothesis Revisited: Income Similarity Effects for Low Income Countries," *Applied Economics Letters* 5:607-611.

ARNON, A. and SPIVAK, A. (1998) "Economic Aspects of the Oslo Peace Process: The Disappointing Consequences of an Incomplete Agreement," *Palestine Israel Journal* 5(3/4):128-142.

ARNON, A. (1998) "The Bullionist Debate," in: H. Kurz and N. Salvadori (eds.) *Elgar Companion to Classical Economics*, Aldershot: Elgar Publishing Press.

Lieberman, O., BEN-ZION, U. and Hauser, S. (1999) "A Characterization of the Price Behaviour of International Dual Stocks: An Error Correction Approach," *Journal of International Money and Finance*. (forthcoming).

BEN-ZION, U., Hibshush, R. and Spiegel, U. (1999) "The Optimal Face Value of a Discount Coupon," *Journal of Economics and Business*. (forthcoming).

Lieberman, O., BEN-ZION, U. and Hauser, S. (1999) "A Characterization of the Price Behaviour of International Dual Stocks: An Error Correction Approach," *Journal of International Money and Finance*. (forthcoming).

BEN-ZION, U., Gutman, E. and Joseph Y. (1999) "Stock Behavior During a Market Crash," in: Cheng-few Lee (ed.) *Advances in Investment Analysis and Portfolio Management*. (forthcoming).

BEN-ZION, U., Rotem, D. and Amsterdam, A. (1998) *Introduction to Micro-Economics at University Level*, Remas,.

CHERNICHOVSKY, D., Kirsanova, T., Potapchik, E., and Sosenskaya, E. (1998) "Growing Regional Inequalities in Health Resources in Russia, and its Potential Impact on the Population's Health," in: M.L. Barer, T.E. Getzen, and G.I. Stoddart, G.I. (eds.) *Health, Health Care and Health Economics; Perspective of Distribution*, J. Wiley & Sons, New York, pp. 253-270.

CHERNICHOVSKY, D. (1998) "Health System Reforms in Industrialized Economies; An Emerging Paradigm," in: R. Stewart (ed.) *Management of Health Care*, Ashgate: Dartmouth, pp. 143-178.

CHERNICHOVSKY, D. (1998) "Private Finance, Supplementary Insurance, and Reform in the Israel's Healthcare System; Perils and Prospects," *Social Security*, Special Edition, 5:29-48.

EINY, E. Holzman, R., and Monderer, D. (1999) "On the Least Core and the Mas-Colell Bargaining Set," *Games and Economic Behavior*, 128:181-188.

EINY, E., Moreno, D. and Shitovitz, B. (1999) "The Core of a Class of Non-Atomic Games Which Arise in Economic Applications," *International Journal of Game Theory*, 28:1-14.

EINY, E., Moreno, D. and Shitovitz, B. (1999) "The Asymptotic Nucleolus of Large Monopolist Market Games," *Journal of Economic Theory*. (forthcoming).

EINY, E., Moreno, D. and Shitovitz, B. (1999) "The Bargaining Set of Large Economies with Differential Information," *Economic Theory*. (forthcoming).

GRADSTEIN, M. and Konrad, K. (1999) "Orchestrating Rent-Seeking Contests," *Economic Journal*, 109:536-545.

GRADSTEIN, M. (1999) "Optimal Taxation and Fiscal Constitution," *Journal of Public Economics* 72:471-485.

GRADSTEIN, M. (1999) "An Economic Rationale for Public Education: The Value of Commitment," *Journal of Monetary Economics*. (forthcoming).

GRADSTEIN, M. and Konrad, K. (1999) "Optimal Structures of Contexts," *Economic Journal*. (forthcoming).

JUSTMAN, M. and GRADSTEIN, M. (1999) "Human Capital, Social Capital and Public Schooling," *European Economic Review*. (forthcoming).

Glazer, A., GRADSTEIN, M. and Konrad, K. (1998) "The Politics of Extreme Policies," *Economic Journal*, 108:1677-1685. (lead article).

GRADSTEIN, M. (1998) "Provision of Public Goods in a Large Economy," *Economic Letters* 229-234.

HOCHMAN, O. (1998) "Land Rents, Optimal Taxation and Local Fiscal Independence in an Economy with Local Public Goods," in: H. W. Richardson (ed.) *Advanced Urban Economics*, Cheltenham, UK: Edward Elgar Publishing.

JUSTMAN, M. and Thisse, J-F., (1999) "Local Public Funding of Higher Education When Skilled Labor is Mobile," *International Tax and Public Finance*. (forthcoming).

JUSTMAN, M. and GRADSTEIN, M. (1999) "Industrial Revolution, Political Transition, and the Subsequent Decline in Inequality in Nineteenth-Century Britain," *Explorations in Economic History*, 36:109-127. (lead article).

JUSTMAN, M. and GRADSTEIN, M. (1999) "The Democratization of Political Elites and the Decline in Inequality in modern economic growth," in: E. Brezis and P. Temin (eds.) *Elites, Minorities and Economic Growth*, Amsterdam: Elsevier. (forthcoming).

JUSTMAN, M., ZUSCOVITCH, E., Porath Y. and Gottesman, O. (1999) "Evaluation of Israel's Industrial R&D Subsidy Program, 1986-94." Ministry of Industry and Trade, 190 pp. (in Hebrew).

JUSTMAN, M., Levinson, E. and SPIVAK, A. (1999) "Unemployment in the South. Negev Center for Regional Development and the Monaster Center;" report for the Ministry of Labor and Welfare. 94 pp. (in Hebrew).

KAPLAN, T. and WETTSTEIN, D. (1999) "Surplus Sharing with a Two Stage Mechanism," *International Economic Review*. (forthcoming).

KAPLAN, T. and WETTSTEIN, D. (1999) "Cost Sharing: Efficiency and Implementation," *Journal of Mathematical Economies*. (forthcoming).

KAPLAN, T. and WETTSTEIN, D. (1999) "Mixed-Strategy Equilibria with Constant-Returns-to-Scale Technology under Bertrand Competition," *Spanish Economic Review*. (forthcoming).

KAPLAN, T. and RUFFLE, B. (1998) "Self-Serving Bias [Comment]," *Journal of Economic Perspectives* 12(2):243-244.

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VI. WORKING PAPER SERIES 1997/98/99 AND ABSTRACTS OF RECENT WORKING PAPERS (issued from the Monaster Center for Economic Research)

Discussion Paper Series 1997

- 97-1 M. Gradstein and M. Justman, "Democratic Choice of an Education System: Implications for Growth and Income Distribution."
- 97-2 M. Gradstein and M. Justman, "The Political Dynamics of Education, Endogenous Growth and Inequality in a Mixed Economy."
- 97-3 T. Kaplan and D. Wettstein, "Surplus Sharing with a Two-Stage Mechanism."
- 97-4 T. Kaplan and D. Wettstein, "Mixed-Strategy Equilibria with Constant-Returns-to-Scale under Bertrand Competition."

- 97-5 A. Klug, "Progress and Paradox in International Economics."
- 97-6 E. Einy and B. Shitovitz, "Von Neumann-Morgenstern Stability of the Symmetric Pareto-Optimal Allocations in Pure Exchange Economies."
- 97-7 M. Justman and J-F Thisse, "Local Public Funding of Higher Education when Skilled Labor is Mobile."
- 97-8 A. Klug and C. Nadav, "On the Predictive Power of the Term Structure During the 1930s."
- 97-9 E. Einy, D. Moreno and B. Shitovitz, "The Core of a Class of Non-Atomic Games which Arise in Economic Applications."
- 97-10 A. Klug and C. Nadav, "Elites and the Economics of Radicalism: Evidence from Oldham, 1842-1852."
- 97-11 E. Einy, R. Holzman and D. Monderer, "On the Least Core and the Mas-Colell Bargaining Set."
- 97-12 E. Einy, D. Moreno and B. Shitovitz, "The Asymptotic Nucleolus of Large Monopolistic Games."
- 97-13 A. Klug and G.W. Smith, "Suez and Sterling, 1956."
- 97-14 M. Justman, "Schumpeterian Waves of Disequilibrium Growth: A General Equilibrium Analysis."
- 97-15 M. Justman and M. Gradstein, "Industrialization, Democratization and Declining Inequality: The Political Transition After the Industrial Revolution."
- 97-16 M. Gradstein and M. Justman, "The Political Transition: A Turning Point in the Dynamics of Growth and Inequality."
- 97-17 M. Justman, "Technological Infrastructure Policy in an Integrated World Economy: National Support, International Coordination."
- 97-18 I. Luski and D. Wettstein, "Wage Competition in the Labor Market: Equilibria and the Impact of Minimum Wage Laws."

Discussion Paper Series 1998

98-1 H. Shalit and S. Yitzhaki, "Estimating Beta."

- 98-3 B. Ruffle and O. Tykocinski, "Unwrapping the Deadweight Loss of Gift Giving."
- 98-4 E. Einy and B. Shitovitz, "Equivalence of Value and Competitive Allocations in Large Economies with Differential Information."
- 98-5 A.P. Gutierrez, U. Regev and D. Zilberman, "Examining God's Utility Function: Why Nature Knows How to Manage Renewable Resources but Humans Might Not."
- 98-6 M. Gradstein, "An Economic Rationale for Public Education: The Value of Commitment."
- 98-7 M. Gradstein, "Optimal Taxation and Fiscal Constitution."
- 98-8 D. Cohen-Zada and M. Justman, "The Effect of Income Distribution on the Public/Private Mix of Educational Services: A Theoretical Model and Evidence from the U.S."
- 98-9 A. Arnon and A. Spivak, "Economic Aspects of the Oslo Peace Process: The Disappointing Consequences of an Incomplete Agreement."

Discussion Paper Series 1999

99-1	A. Avishur and Y., Tsoref, "On the Predictability of Kibbutz Financial Distress: A Principal Component Analysis with Bootstrap Confidence Intervals."
99-2	Y. Tsur and A. Zemel, "Sustainable Water Policies and the Optimal Development of Desalination Technologies."
99-3	E. Einy, D. Moreno and B. Shitovitz, "Fine Value Allocations in Large Exchange Economies with Differential Information."
99-3.1	E. Einy, D. Moreno and B. Shitovitz, "The Bargaining Set of a Large Economy with Differential Information."
99-4	E. Einy, D. Moreno and B. Shitovitz, "On the Core of an Economy with Differential Information."
99-5	O. Hochman, D. Pines and B. Ruffle, "The Agglomeration of Clubs."
99-6	D. Perez-Castrillo and D. Wettstein, "Bidding for the Surplus: A Non-Cooperative Approach to the Shapley Value."

- 99-7 B. Moldovanu and A. Sela, "The Optimal Allocation of Prizes in Contests."
- 99-8 M. Gradstein and M. Justman, "Public Schooling, Social Capital and Growth."
- 99-10 T. Kaplan and B. Ruffle, "The Self-Serving Bias and Beliefs about Rationality."
- 99-11 E. Einy, D. Moreno and B. Shitovitz, "Information Advantage in Cournot Oligopoly."
- 99-12 A. Preminger and H. Shalit, "Normality is a Necessary and Sufficient Condition for OLS to Yield Robust Results."
- 99-13 A. Arnon and J. Weinblatt, "Sovereignty and Economic Development: The Case of Israel and Palestine."
- 99-14 D. Sonsino, U. Benzion and G. Mador, "The Complexity Effects on Choice with Uncertainty Experimental Evidence."
- 99-15 A. Spivak, "Pension Reform in Israel." (in Hebrew).
- 99-16 M. Gradstein and M. Justman, "Education, Social Cohesion, and Economic Growth."

ABSTRACTS OF WORKING PAPERS (issued since the previous report)

ON THE PREDICTABILITY OF KIBBUTZ FINANCIAL DISTRESS: A PRINCIPAL COMPONENT ANALYSIS WITH BOOTSTRAP CONFIDENCE INTERVALS

A. Avishur and Y. Tsoref

Discussion Paper No. 99-1

This paper proposes an econometric model for conditional forecasting of kibbutz financial distress for a range of one to three years. Our sample covers financial and demographic data for about 32 kibbutzim over a seven-year period (1990-1996). Data on an additional six kibbutzim over the same period serve as a validation sample. The primary interest in examination of the economic performance of the kibbutz is the fact that its driving characteristic is collective rather than individual profit-maximizing. This study is also highly motivated by the kibbutz debt crisis exposed during the mid-1980s. A major task was the adjustment of information found in kibbutz financial statements into economically meaningful variables. Our data set contains 26 explanatory variables defined over eight different dimensions: liquidity, profitability, cash flow, operating efficiency and growth, capital structure, saving rate, demography, and size. We refer to the annual change in productive

equity, scaled by either productive assets or annual sales, as representing developments in kibbutz financial confidence. Multicollinearity is coped with by the employment of a principal component regression. Goodness of fit is evaluated by examination of various dispersion statistics and by comparing the model's performance with that of a 'naive forecast', maintaining that performance measures follow a random walk. The asymptotic behavior of the results is assessed via application of a pair bootstrap simulation. The model as a whole exhibits high statistical significance, efficiency of forecast, and a good fit. It outperforms the naive forecast model in all calculated measures of dispersion. This outcome is reaffirmed by the bootstrap simulation. Our findings suggest that financially distressed kibbutzim are less profitable, tend to be highly leveraged, and are characterized by low and even negative saving rates, and a higher social burden. We also find empirical support for the emergency cash reserve, the optimal capital structure, and the heterogeneity hypotheses.

SUSTAINABLE WATER POLICIES AND THE OPTIMAL DEVELOPMENT OF DESALINATION TECHNOLOGIES

Y. Tsur and A. Zemel

Discussion Paper No. 99-2

In many arid and semi-arid regions whether or not to use desalinated water has long been a non-issue and policy debates are focused on the timing and extent of the desalination activities. We offer a model to analyze how water scarcity and demand structure, on the one hand, and cost reduction via R&D activities, on the other hand, affect the desirable development of desalination technologies and the optimal time profiles of fresh and desalinated water supplies. The optimal R&D policy is found to follow a Non-Standard Most Rapid Approach Path (NSMRAP): The state of desalination technology — the accumulated knowledge from R&D activities — should approach a prespecified target process as rapidly as possible and proceed along it forever. The NSMRAP property enables a complete characterization of a comprehensive water policy in terms of a simple and tractable set of rules.

FINE VALUE ALLOCATIONS IN LARGE EXCHANGE ECONOMIES WITH DIFFERENTIAL INFORMATION

E. Einy, D. Moreno and B. Shitovitz

Discussion Paper No. 99-3

We show that the set of fine value allocations of a pure exchange economy with a continuum of traders and differential information coincides with the set of competitive allocations of an associated symmetric information economy in which each trader has the "joint information" of all the traders in the original economy.

THE BARGAINING SET OF A LARGE ECONOMY WITH DIFFERENTIAL INFORMATION

E. Einy, D. Moreno and B. Shitovitz

Discussion Paper No. 99-4

We study the Mas-Colell bargaining set of an exchange economy with differential information and a continuum of traders. We established the equivalence of the private bargaining set and the set of Radner competitive equilibrium allocations. As for the weak fine bargaining set, we show that it contains the set of competitive equilibrium allocations of an associated symmetric information economy in which each trader has the "joint information" of all the traders in the original economy, but unlike the weak fine core and the set of fine value allocations, it may also contain allocations which are not competitive in the associated economy.

ON THE CORE OF AN ECONOMY WITH DIFFERENTIAL INFORMATION

E. Einy, D. Moreno and B. Shitovitz

Discussion Paper No. 99-5

We show that the fine core of an atomless exchange economy with differential information is a subset of the ex-post core of the economy. Moreover, the fine core may be empty, and therefore it may be a proper subset of the ex-post core. The inclusion relation does not hold for economies with a finite number of traders.

THE AGGLOMERATION OF CLUBS

O. Hochman, D. Pines and B. Ruffle

Discussion Paper No. 99-6

The literature on agglomeration has focused largely on direct attraction effects, that is, entities, usually firms, drawn to one another, to enhance the output of their activity. We establish the agglomeration of clubs arising from an indirect effect. When the population is uniformly distributed over space, there are an infinite number of solutions, all but one are without the agglomeration of clubs. However, once we allow the population to concentrate at an increasing marginal cost of density, clubs of multiple types, in an effort to minimize household transportation costs, agglomerate, along with households, in centers. In fact, the agglomeration of clubs to a single point is the unique solution in the case of a symmetric

utility function. Thus, this paper provides sufficient conditions for an economy made up of monocentric cities.

BIDDING FOR THE SURPLUS: A NON-COOPERATIVE APPROACH TO THE SHAPLEY VALUE

D. Perez-Castrillo and D. Wettstein

Discussion Paper No. 99-7

We consider zero-monotonic environments with transferable utility and propose a simple noncooperative game to determine how the surplus generated by cooperation is to be shared. First, the players bid for the right to propose a sharing of the surplus. Second, after the winner pays the bids, she makes a proposal to each of the other players. If the proposal is rejected, the rest of the players will play the same game again with the proposer left out. If her proposal is accepted, she forms the grand coalition, keeping its value for herself in exchange for the proposed payments to the rest of the players. We show that the final outcome of any subgame perfect equilibrium of this mechanism always coincides with the vector of the Shapley value payoffs. Finally, we extend our results to implement the weighted Shapley value.

THE OPTIMAL ALLOCTAION OF PRIZES IN CONTESTS

B. Moldovanu and A. Sela

Discussion Paper No. 99-8

We study a contest with multiple (not necessarily equal) prizes. Contestants have private information about an ability parameter that affects their costs of bidding. The contestant with the highest bid wins the first prize, the contestant with the second-highest bid wins the second prize, and so on until all the prizes are allocated. All contestants incur their respective costs of bidding. The contest's designer maximizes the expected sum of bids. Our main results are: 1) We display bidding equilibria for any number of contestants having linear, convex or concave costs functions, and for any distribution of abilities. 2) If the cost functions are linear or concave, then, no matter what the distribution of abilities is, it is optimal for the designer to allocate the entire prize sum to a single "first" prize. 3) We give a necessary and sufficient condition ensuring that several prizes are optimal if contestants have a context cost function.

PUBLIC SCHOOLING, SOCIAL CAPITAL AND GROWTH

M. Gradstein and M. Justman

Discussion Paper No. 99-9

We consider the contribution of public education to growth through its role in building social capital—instilling common values and norms that lower economic transaction costs and reduce social tensions between different population groups. This is modeled in the context of a political economy framework that focuses on the role of public education in reducing redistributive rent-seeking. Our analysis shows that the social compromises needed to mobilize popular support for public education are more difficult to achieve the deeper are the cultural divisions in society, and that a uniform public school system, when adopted, promotes stronger growth than would a private system.

THE SELF-SERVING BIAS AND BELIEFS ABOUT RATIONALITY

T. Kaplan and B. Ruffle

Discussion Paper No. 99-10

Most previous experiments attempting to establish the existence of the self-serving bias have confounded it with strategic behavior. We design an experiment that controls for strategic behavior (Haman effects) and isolates the bias itself. The self-serving bias that we measure concerns beliefs about the rationality of others. We find that the existence of the bias is restricted to one of the four particular subpopulations tested – female psychology students.

INFORMATION ADVANTAGE IN COURNOT OLIGOPOLY

E. Einy, D. Moreno and B. Shitovitz

Discussion Paper No. 99-11

We model an oligopolistic industry where a number of firms that are asymmetrically informed about the environment compete via quantities, and we study how the information available to a firm affects its equilibrium profits. Indeed we find that if all firms have access to the same constant returns to scale technology, in any Bayesian equilibrium the information advantage of a firm is rewarded.

NORMALITY IS A NECESSARY AND SUFFICIENT CONDITION FOR OLS TO YIELD ROBUST RESULTS

A. Preminger and H. Shalit

Discussion Paper No. 99-12

Recently, Yitzhaki (1996) showed that the OLS estimator is a weighted average of the slopes defined by adjacent observations. The weights depend only on the distribution of the independent variable. In this note, we show that equal weights can only be obtained if, and only if, the independent variable is normally distributed. This may serve as the basis for a

new test for normality.

SOVEREIGNTY AND ECONOMIC DEVELOPMENT: THE CASE OF ISRAEL AND PALESTINE

A. Arnon and J. Weinblatt

Discussion Paper No. 99-13

THE COMPLEXITY EFFECTS ON CHOICE WITH UNCERTAINTY — EXPERIMENTAL EVIDENCE

D. Sonsino, U. Benzion and G. Mador

Discussion Paper No. 99-14

We present experimental evidence suggesting that human subjects dislike complexity in (intertemporal) choice with uncertainty. In particular, our results suggest that the probability of choosing a given alternative (in binary choice tasks) decreases with the relative complexity of that alternative. Moreover, complexity increases the noise in the choice process and thus increases the chances that the (otherwise) inferior alternative will be selected. Our results contradict the predictions of (discounted) expected utility theory. The results also contradict intuitively appealing axioms like "stochastic dominance" and "convexity." We demonstrate that these "complexity effects" may lead to inefficient portfolio selection. We also argue that the perceived complexity of a given lottery may depend on editing procedures and be subjected to framing effects.

PENSION REFORM IN ISRAEL

A. Spivak

Discussion Paper No. 99-15

PUBLIC SCHOOLING, SOCIAL CAPITAL AND GROWTH

M. Gradstein and M. Justman

Discussion Paper No. 99-16

We propose a theory which considers the contribution of education to growth through its role in promoting common social norms. We show that decentralized education, in which different social groups separately determine the social content of their school curricula, leads to excessive polarization, which increases transaction costs and hence results in less than optimal growth. The optimal trajectory involves a gradual, reciprocal convergence of school curricula towards the middle ground. However, this may be difficult to implement in a political context in which all agents are identified with one group or another. Characterizing the possible outcomes of legislative bargaining in a representative democracy, we show that centralization of schooling may result in overly rapid homogenization in some cases, and, perhaps surprisingly, excessive polarization in others.

VII. RESEARCH SUMMARIES

The following are brief summaries of the research interests and activities of Center members for 1998/99:

Arie Arnon

Prof. Arnon continues to be actively involved in research on Peace in the Middle East. He is also working on a research project entitled "Free (and not so free) Banking Theories." Prof. Arnon's research interests primarily deal with the history of economic thought, macro-economics, monetary economics and banking, the Israeli economy, privatization and the Arab economies.

Uri Ben-Zion

Prof. Ben-Zion's current research projects deal with evaluation of mutual funds; interrelationship between international markets and country funds; marketing policy by use of cent-off-coupons; and use of activity-based costing in medical decision-making.

Tuvia Blumenthal

Prof. Blumenthal specializes in the Japanese economy and economic development. His current research projects are directed toward the Japanese education system, economic effects of the introduction of industrial robots, and Japanese management practices.

Dov Chernichovsky

Dr. Chernichovsky conducts research on health economics with a particular focus on health policy in societies under social, political, and economic stress. He works extensively with the Russian health system.

Ezra Einy

Prof. Einy's research concentrates on values of games, large games, voting games, utility theory, inequality measures, and refinement of correlated equilibria. His current studies are centered on solution concepts of economies with differential information.

Mark Gradstein

Prof. Gradstein's research interests are concerned with private versus public provision of public goods, as well as public growth promoting policies. His current project (jointly with M. Justman) focuses on growth promoting policies as implied by actual political mechanisms.

Oded Hochman

Prof. Hochman's research interests center on urban and environmental economics, public economics, industrial organization and economic growth. His current research projects

include urban location and pollution, marketing of quality differentiated products, efficient water pricing, uncertainty in water supply and its economic implications, and impact of income tax on sizes of cities.

Moshe Justman

Prof. Justman's activities focus on the political economy of education, growth, inequality and mobility. He also does work on technology policy and on regional development..

Todd Kaplan

Dr. Kaplan's research interests focus on mechanism design, debt contracts, experimental economics, and auctions.

Yaakov Khazanov

Dr. Khazanov does research on the impact of economic growth on nationalist movements.

Adam Klug

Dr. Klug's principal research interests concentrate on quantitative economic history, focusing on international monetary and trade issues and political economy.

Israel Luski

Prof. Luski's research interests deal with the areas of industrial organization, R&D, growth, productivity, technological change, technology diffusion, and wage policy. His present research projects focus on patent races, the economics of the Middle East, investment in the Palestinian economy for initiating a process of growth, government expenditure, government policy toward multinational enterprises, and demographic transition.

Uri Regev

Prof. Regev's research focuses on environmental implications of pest management policies which involve issues of environmental sustainability and the ability to maintain a quality life style in a world governed by a population explosion and increasing environmental pressures. Measurement of environmental amenities and mechanism design problems in regulation of economic activities that affect the environment are the subjects of a prospective Ph.D. project to be undertaken at the Center.

Bradley Ruffle

Bradley Ruffle is an experimental economist. He uses experimental methods in the laboratory and in the field to test theories and examine phenomena in product and labor markets, industrial organization, negotiations, and the role of signaling, emotions, and cognitive biases in interactive and individual decision making.

Aner Sela

Dr. Sela's research concerns game theory, learning, auction theory, and industrial organization.

Haim Shalit

Dr. Shalit's research is directed toward the use of the mean-Gini model and Conditional Stochastic Dominance in financial markets. His work on Marginal Conditional Stochastic Dominance (MCSD) constructs a portfolio of stocks that improves upon the market portfolio. Dr. Shalit succeeded in developing a statistical procedure for MCSD that demonstrates the dominance of the new portfolio. In addition, his work on the mean-Gini model shows how the standard procedure of Ordinary Least Squares used to estimate systematic risk is not robust with respect to wide market fluctuations.

Avia Spivak

Prof. Spivak continues his research activities in two main fields of interest: the economics of peace in the Middle East and the economics of pensions and social insurance. He currently serves as chairman of the committee at the Ministry of Finance that is in charge of defining a new curriculum for insurance agents.

Oren Sussman

Dr. Sussman's main research interests focus on two topics: i) macroeconomics and finance and (ii) contract-standardization and institutional change.

Jimmy Weinblatt

Prof. Weinblatt's research efforts are devoted to pursuing various issues within the large scale project on the Economic Aspects of Peace in the Middle East: macroeconomic modeling, Israeli-Jordanian-Palestinian trade and the development of special industrial zones. Much of his time at present is taken up with his responsibilities as Dean of the Faculty of Humanities and Social Sciences.

David Wettstein

Dr. Wettstein's research interests focus on cost allocation, innovation and the patent system, implementation of cooperation solution concepts (the Shapley value, bargaining sets), and auctions.

Ehud Zuscovitch

The scope of Prof. Zuscovitch's research interests include economics of technological change, evolutionary economics, diffusion of innovations, innovations in complex systems, industrial learning and competitive strategy, and economic features of advanced technologies. Prof. Zuscovitch also explores the implications of survival to evolutionary economics. In monetary theory, Prof. Zuscovitch focuses on the informational efficiency of the account function unit of money.