

**THE PHILLIPE MONASTER CENTER  
FOR ECONOMIC RESEARCH**

**ACTIVITY REPORT**

**2011/12**

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**TABLE OF CONTENTS**

<b>I.</b>	<b>MEMBERS OF THE CENTER AND THE STEERING COMMITTEE</b>	<b>3</b>
<b>II.</b>	<b>OPENING REMARKS</b> (presented by Ori Haimanko, Director)	<b>4</b>
<b>III.</b>	<b>ACTIVITIES IN DETAIL:</b> Guests, Seminars, Research Contracts, Fellowships and Awards, Committees, Appointments, and Cooperation with Other Institutions	<b>5</b>
<b>IV.</b>	<b>PARTICIPATION IN CONFERENCES AND SEMINARS</b>	<b>12</b>
<b>V.</b>	<b>PUBLICATIONS</b>	<b>15</b>
<b>VI.</b>	<b>WORKING PAPERS: Titles and Recent Abstracts</b>	<b>18</b>
<b>VII.</b>	<b>RESEARCH SUMMARIES</b>	<b>23</b>

**I. MEMBERS OF THE MONASTER CENTER FOR ECONOMIC RESEARCH** (some members are affiliated with departments other than the Department of Economics)

**Director:** Prof. Ori Haimanko

Steering committee: Prof. Ori Haimanko, Prof. Oscar Volij and Prof. David Wettstein

**Members:**

Dr. Suleiman Abu-Bader

Dr. Aamer Abu-Qarn

Dr. Salem Abo-Zaid

Prof. Arie Arnon

Prof. Ofer Azar, Department of Business Administration

Prof. Gila Benisti

Dr. Tomer Blumkin

Dr. Danny Cohen-Zada

Prof. Leif Danziger

Prof. Ezra Einy

Dr. Koresh Galil

Prof. Arie Gavious, Department of Industrial Engineering and Management

Prof. Mark Gradstein

Prof. Ori Haimanko, Director, Monaster Center for Economic Research

Prof. Moshe Justman

Prof. Israel Luski

Dr. Oren Rigbi

Prof. Bradley Ruffle

Prof. Edna Schechtman, Department of Industrial Engineering and Management

Dr. Ella Segev, Department of Industrial Engineering and Management

Prof. Aner Sela

Prof. Haim Shalit

Prof. Avia Spivak

Dr. Karine van der Beek

Prof. Oscar Volij, Chairman, Department of Economics

Prof. David Wettstein

Dr. Ro'i Zultan

## II. OPENING REMARKS

The Monaster Center had another productive year in 2011-2012. During this period close to 60 articles were published or accepted for publication, some in leading economics journals. Also many individual research projects, both those recently supported and ongoing ones, were supported through competitive grants (including ISF, NSF, GIF, EU IRG). And, as in the past, our weekly seminar meetings, together with the additional bi-weekly seminar series dedicated to empirical economics, accommodated a steady flow of visitors from other institutions.

The Center continued to cover the submission costs to journals and conferences of the members and their students. As in previous years, junior faculty members additionally benefited from partial reimbursement of their conference registration fees. Direct funding of select research projects, involving junior faculty, has been approved and will be carried out in 2013. The secretarial assistance, partly funded by the center, has been maintained at the same level as last year: the secretary is now present at the Center during standard work hours four days a week.

To mention a few personnel changes, Dr. Salem Abo-Zaid has left the department for a position abroad, and Prof. Israel Luski has retired, after being on sabbatical last year. Dr. Dror Brenner, an applied labor economist, will be joining our ranks in 2013, and Dr. Mridu Goswami, a post-doctoral student with a Ph.D. from Indian Statistical Institute (ISI), Delhi, will be arriving in December 2012.

As always, we thank the Center's secretary, Ms. Ella Ginzburg, for her reliable year-round assistance and gratefully acknowledge the work of our English editor, Ms. Estelle Schulgasser, who provides invaluable help in our writing activities, and whose efforts are indispensable in compiling and editing this report.

Prof. Ori Haimanko, Director

### III. ACTIVITIES IN DETAIL

#### 1) Guests of the Center and the Department of Economics

This year, owing to the support from the Center, we hosted the following guest lecturers from abroad:

Robert Sauer (Bristol University)  
 Nick Netzer (University of Zurich)  
 Elhanan Helpman (Harvard University)  
 Giacomo Corneo (Free University of Berlin)  
 Yosef Bonaparte (University of New Hampshire)  
 Ram Orzach (Oakland University)  
 Javier Arin (University of the Basque Country)  
 Peter Koudijs (Stanford GSB)  
 Markus Brueckner (The University of Adelaide)  
 Ori Weisel (Max Planck Institute of Economics, Jena)  
 Shachar Kariv (University of California, Berkeley)  
 Armin Schmutzler (University of Zurich and CEPR)  
 Pradeep Dubey (SUNY Stony Brook)  
 Michael Kaganovich (Indiana University)  
 Elena Inarra (University of the Basque Country)  
 Andriy Zapelchelnjuk (University of London)  
 Ron Siegel (Northwestern University)  
 Roy Mill (Stanford University)  
 Nadav Ben-Zeev (European University Institute)  
 David Weiss (University of Pennsylvania)

#### 2) Seminar Lectures Presented by Department Members and Guests from Israel and Abroad (these include those that are presented as part of the regular Thursday seminar program, those that are presented at the bi-weekly empirical workshop, and special seminars).

- 05.01.12 Robert Sauer (Bristol University)  
 “Does It Pay for Women to Volunteer?”
- 05.01.12 Nick Netzer (University of Zurich)  
 “Mechanism Design and Intentions”
- 12.01.12 Elhanan Helpman (Harvard University)  
 “Trade and Inequality: From Theory to Estimation”
- 18.01.12 Avi Ebenstein (Hebrew University)  
 “Understanding the Role of China in the ‘Decline’ of US Manufacturing”
- 19.01.12 Giacomo Corneo (Free University of Berlin)  
 “Work Norms and the Welfare State”

- 25.01.12 Alex Krumer (Ben-Gurion University)  
“The Equilibrium Order of Games in a Best-of-Three Contest”
- 26.01.12 Limor Hatsor (Tel-Aviv University)  
“Occupational Choice: Teacher Quality Versus Teacher Quantity”
- 01.03.12 Yosef Bonaparte (University of New Hampshire)  
“Political Climate, Optimism and Investment Decisions”
- 14.03.12 Ram Orzach (Oakland University)  
“Reverse Game Theory in Case Evaluation with Differential Information”
- 15.03.12 Javier Arin (University of the Basque Country)  
“The SD-prenucleolus for TU Games”
- 21.03.12 Hagay Etkes (Bank of Israel)  
“All in the Palestinian Family: Does Male Employment in Israel Reduce Female Employment and Enhance Youth Schooling?”
- 22.03.12 Peter Koudijs (Stanford GSB)  
“The Boats that Did Not Sail: News and Asset Price Volatility in a Natural Experiment”
- 28.03.12 Ori Weisel (Max Planck Institute of Economics, Jena)  
“Price Competition Between Teams with Heterogeneous Incentive Schemes”
- 29.03.12 Dov Samet (Tel-Aviv University)  
“Interim Agreements: In the Footsteps of Zeno, Parkinson, and Nash”
- 01.04.12 Markus Brueckner (The University of Adelaide)  
“Domestic Savings Responses to Transitory Output Shocks: Evidence from Rainfall Shocks in Sub-Saharan Africa”
- 18.04.12 Itai Ater (Tel-Aviv University)  
“Do Customers Learn from Experience? Assessing Experience-Based Choices Among Three-Part Tariff Plans”
- 19.04.12 Shachar Kariv (University of California, Berkeley)  
“Who is (More) Rational?”
- 02.05.12 Edith Sand (Bank of Israel)  
“The Friends Factor: How Students’ Social Networks Affect their Academic Achievement and Well-Being”
- 03.05.12 Armin Schmutzler (University of Zurich and CEPR)  
“Comparing Contests”
- 16.05.12 Offer Moshe Shapir (Ben-Gurion University)  
“CDS Spreads: Time Series and Cross-Section Analyses”

- 16.05.12 Eyal Kimhi (Hebrew University – Rehovot)  
“Land Reform and Its Distributional Implications: The Case of Georgia”
- 17.05.12 Pradeep Dubey (SUNY Stony Brook)  
“Games of Money and Status: The Optimal Wage-Title Schedule”
- 24.05.12 Michael Kaganovich (Indiana University)  
“Higher Education Reform and Access to College in Russia”
- 31.05.12 Elena Inarra (University of the Basque Country)  
“Artificial Distinction and Real Discrimination”
- 07.06.12 Andriy Zapechelnyuk (University of London)  
“Eliciting Information from a Committee”
- 13.06.12 Esteban F. Klor (Hebrew University)  
“The Long-Run Effect of 9/11: Terrorism, Backlash, and the Assimilation of Muslim Immigrants in the West”
- 14.06.12 Alex Ilek (Bank of Israel)  
“Learning under Signal-to-Noise Ratio Uncertainty”
- 21.06.12 Ron Siegel (Northwestern University)  
“Reallocation Costs and Efficiency”
- 27.06.12 Aviad Tur-Sinai (Israel Central Bureau of Statistics and BGU)  
“Is Job Stability at the Outset of One’s Career Good for Its Continuation”
- 28.06.12 Karine van der Beek (Ben-Gurion University)  
“Mechanization and Skill Choice on the Eve of the British Industrial Revolution, 1710-1770”
- 25.10.12 Yael Limor-Melzer (Ben-Gurion University)  
“Identifying the Effect of Education on Earnings in Israel”
- 01.11.12 Oren Rigbi (Ben-Gurion University)  
“Organizational Structure, Police Activity and Crime”
- 08.11.12 Shiran Rachmilevitch (University of Haifa)  
“Bribing in First-Price Auctions”
- 15.11.12 Amnon Schreiber (Hebrew University)  
“Economic Indices of Absolute and Relative Riskiness”
- 22.11.12 Shlomo Yitzhaki (Hebrew University)  
“Gini’s Mean Difference Offers a Response to Leamer’s Critique”
- 29.11.12 Roy Mill (Stanford University)  
“Race, Skin Color, and Economic Outcomes in Early 20<sup>th</sup> Century America”

- 05.12.12 Amnon Schreiber (Hebrew University)  
Economic Indices of Absolute Relative Riskiness”
- 06.12.12 Sarit Weisburd (Hebrew University)  
Economic Indices of Absolute and Relative Riskiness”
- 13.12.12 Hosny Zoabi (Tel-Aviv University)  
“Retirement Age Across Countries: The Role of Occupations”
- 20.12.12 Michel Strawczynsky (Hebrew University)  
“The Optimal Inheritance Tax in the Presence of Investment in Education”
- 26.12.12 Nadav Ben-Zeev (European University Institute)  
“A New VAR-Based Approach to Identifying News Shocks”
- 27.12.12 David Weiss (University of Pennsylvania)  
“Risky Income, Risky Families: Marriage and Divorce in a Volatile Labor Market”

### **3) Research Contracts, Fellowships and Awards**

Leif Danziger is a research fellow at the Center for Economic Studies (CESifo) in Munich, Germany as well as the Institute for the Study of Labor (IZA) in Bonn, Germany.

Ezra Einy is a fellow of the Society for the Advancement of Economic Theory.

Mark Gradstein was invited keynote speaker at the Annual Meetings of the Asian Law and Economics Association (ASLEA), Hong Kong. He is a Research Fellow at the Collegio Carlo Alberto, Italy.

Moshe Justman is a Senior Research Fellow in the Van Leer Jerusalem Institute, where he currently heads the Institute’s Program on Civil Society. In addition, he was awarded a research grant on: Semi-parametric estimation of the impact of Israeli high schools on access to higher education, by the Rothschild Cesarea Foundation, 2012-15. Prof. Justman is part of a group at the University of Melbourne that was awarded a research contract to conduct empirical analysis of education in Victoria, Australia, 2011-15.

Oren Rigbi was awarded a EU International Reintegration Grant in the amount of 100,000 Euro (2009-2013) entitled “Insights from Person-to-Person Credit Markets” and also a grant from the Israel Science Foundation in the amount of \$87,861 (2010-2013) entitled “The Economics of Alternative Credit Markets.”

Bradley Ruffle continues to hold a grant from the German-Israeli Foundation for Scientific Research and Development (GIF). The research project is entitled “Pricing Strategies in a Dynamic Network Market: An Experimental Analysis,” and is being carried out with A. Weiss and F. Heinemann.

Since 2003 Aner Sela is a Research Fellow of the CEPR.

Avia Spivak is a Senior Fellow at the Van Leer Institute.

Karine van der Beek is the recipient of an Israel Science Foundation (ISF) Individual Grant for the project: "The Development in Human Capital on the Eve of the Industrial Revolution (1710-1772)." The grant is in the amount of \$66,500 for the period 2011-2013. She also received a U.S.-Israel Binational Science Foundation (BSF) Regular Grant (together with Joel Mokyr from Northwestern University, IL), for the project "Technology-skill Complementarity during the Industrial Revolution: 1710-1810" in the amount of \$84,000 for the period 2011-2013. She continues to be supported by The Institute for New Economic Thinking (INET) Inaugural Grant for the project: "Technology-Skill Complementarity on the Eve of the Industrial Revolution: New Evidence from England (1710-1772)" in the amount of \$22,600 for the period 2011-12.

#### **4) Committees, Appointments and 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.

Suleiman Abu-Bader cooperates with a group of Israeli, Palestinian and international economists on research devoted to the economic aspects of a permanent agreement between Israel and Palestine. This research is done within the framework of the AIX Group. He is coordinator of economic studies at the Eilat Campus of Ben-Gurion University.

Aamer Abu-Qarn collaborates with Paul Dunne from the University of Cape Town; Miki Malul from Ben-Gurion University; Salem Abo Zaid from Texas Tech University; and Muhammad Asali from Tbilisi State University.

Arie Arnon, cooperating with some twenty-five researchers in economics and other disciplines, helped to create the Economics and Society Program at the Van Leer Jerusalem Institute. He also cooperates with a group of Israeli, Palestinian and international economists on research devoted to the economic aspects of a permanent agreement between Israel and Palestine for which he is coordinator of the Israeli side and head of the research on the Palestinian refugees. This research is done within the Aix Group since 2002. In 2010 and 2011 the Group will work on economic elements associated with the Arab Peace Initiative. A grant from the EC will facilitate the research.

Starting January 2013 Ofer Azar will be Editor-in-Chief of the Journal of Socio-Economics. This journal is ranked among the top three in both behavioral and socio-economics. Prof. Azar is also an Associate Editor for two other top journals in this field: the Journal of Economic Behavior & Organization and the Journal of Economic Psychology. He also serves as an Advisory Board Member in the SSRN Journals in Behavioral & Experimental Economics.

In addition, Prof. Azar serves as the Chairperson of the Executive Committee of the International Confederation for the Advancement of Behavioral Economics and Economic Psychology (ICABEEP) and as President of the Society for the

Advancement of Behavioral Economics (SABE). He is also the Head of the Multidisciplinary Specialty in the Department of Business Administration and the Teaching Committee Chairperson of the Guilford Glazer Faculty of Business and Management at Ben-Gurion University of the Negev.

Prof. Azar's recent research collaborations include Ronnie Lidor, the Head of the Zinman College of the Wingate Institute, with Michael Bar-Eli from the Department of Business Administration at BGU, as well as several graduate students.

Tomer Blumkin is a member of the Cesifo Research Institute in Munich and the IZA Institute for labor economics in Bonn. Tomer collaborates with Oren Rigbi and Bradley Ruffle from BGU, with Efraim Sadka, Yotam Shem Tov and Yoram Margalioth from Tel Aviv University and with Volker Grossmann from Fribourg University in Switzerland.

Danny Cohen-Zada collaborates with Todd Elder from Michigan State University and Yotam Margalit from Columbia University. He is also a research fellow at the Institute for the Study of Labor (IZA) (Bonn, Germany) since September 2010.

Leif Danziger collaborates with Eyal Baharad from Haifa University and Ruth Ben-Yashar from Bar-Ilan University.

Koresh Galil collaborates with Zvika Afik (BGU), Ohad Arad (BGU), Uri Ben-Zion (BGU), Avigail Konikov (Bar-Ilan University), Cesario Mateus (Greenwich University), and Offer Shafir (BGU).

Ori Haimanko does collaborative research on the following projects:  
Games with Incomplete Information – joint with Atsushi Kajii (University of Kyoto);  
Competitive Contracts with Heterogeneous Agents – joint with John Geanakoplos (Yale) and Pradeep Dubey (SUNY and Yale).

Moshe Justman is President of the Israel Economic Association, 2012-14. He is also a Professorial Research Fellow in the Melbourne Institute for Applied Economic and Social Research. In addition, he serves on the steering committee of the Israel Academy of Sciences' Initiative for Applied Research on Education and on the Rothschild Fellowship selection committee.

Oren Rigbi collaborates with Itai Ater from Tel-Aviv University, Yehonatan Givati from the Hebrew University, Jonathan Meer from Texas A&M University, Danny Cohen Zada from BGU and Yotam Margalit from Columbia University.

Bradley Ruffle serves as an Associate Editor at the International Journal of Industrial Organization (IJIO) (since 2006). He also served as guest editor of an issue of the IJIO on "Experiments in Industrial Organization" that appeared in January 2011. He collaborates with Naomi Feldman (Federal Reserve) Todd Kaplan (Haifa University) and Oscar Volij (BGU).

Edna Schechtman does joint research with Shlomo Yitzhaki (Central Bureau of Statistics), Mike Sherman (Texas A&M University), David Shinar (BGU) and Yisrael Parmet (BGU). She currently serves as president of the Israel Statistical Association.

Ella Segev collaborates with Ron Lavi (Technion), Paul Schweiner (York University), Gal Hochman (Rutgers University), Qiang Fu (National University, Singapore) Gabrielle Gayer (Bar-Ilan University) and Aner Sela.

Aner Sela does joint research at Ben-Gurion University with Ella Segev, Ezra Einy, Ori Haimanko and Ram Orzach (Oakland University).

Haim Shalit does joint research with Sergio Ortobelli (University of Bergamo, Italy), Svetlozar T. Rachev (University of Karlsruhe), Shlomo Yitzhaki (Central Bureau of Statistics), Frank Hespeler (UC San Diego), and Doron Greenberg (Ariel University Center).

Avia Spivak collaborates on research with Nathan Sussman (Hebrew University), Rami Yosef (BGU) and Oded Palmon in the US. Since 2007 he is a member of the Shochat sub-committee for tuition in higher education and for the Israel Prize for Economics.

Karine van der Beek collaborates with Prof Joel Mokyr (Northwestern University, IL) on a joint project: “Technology-skill Complementarity during the Industrial Revolution: 1710-1810”

Oscar Volij collaborates with Ana Urrutia and Casilda Lasso (University of the Basque Country). He serves as associate editor for the Journal of Public Economic Theory.

David Wettstein works on the following joint research projects: “Coalitional Externalities, Strategic Bargaining and Efficient Values” with Peter Borm (Tilburg University) and Yuan Ju (York University); “The Optimal Design of Rewards in Contests” with Todd R. Kaplan (University of Haifa); and “Innovation Contests” with David Perez-Castrillo (Universitat Autònoma de Barcelona).

#### **IV. PARTICIPATION IN CONFERENCES AND SEMINARS**

##### **Aamer Abu-Qarn**

A Socioeconomic Profile of the MENA Region, AIX Conference, Paris, France, October 28-29, 2011.

##### **Suleiman Abu-Bader**

AIX Group –International Conference “Trading Peacefully: How to Increase Trade in MENA after a Comprehensive Arab-Israeli Peace,” Rabat, Morocco, February 2011 (with Joseph Zeira and Saad Khatib).

EEA - European Economic Association 26th Annual Congress, Oslo, Norway, August 2011.

##### **Arie Arnon**

February 2011, Aix Conference, Rabat, Morocco, “The Palestinian Refugees: Regional and Bilateral Economic Dimensions.”

May 2011, ESHET – European Society for the History of Economic Thought, Istanbul, Turkey, “Crises and Theorizing Economic Policy: The Case of Monetary

Theory during the 19th Century” (also at the Research Division Seminar, Bank of Israel, June 13, 2011).

October, 2011, Aix Group’s Annual Conference, Paris, France, “The Arab Peace Initiative and Israeli-Palestinian Peace: The Political Economy of a New Period.”

December, 2011, The International Conference organized by The Thomas Guggenheim Program for the History of Economic Thought, Ben Gurion University of the Negev, “David Hume and Classical Monetary Theory.”

June 2012, History of Economics Society Annual Meeting, Brocks University, Canada, “A Re-Examination of Keynes’s and Hayek’s Disputes and Agreements Concerning “Interventions” in the Economy, 1924 to 1946.”

### **Ofer Azar**

#### **Seminar presentations**

2012: UC Riverside, Max Planck Institute of Economics in Jena.

#### **Conference presentations**

2011: 7<sup>th</sup> International Meeting on Experimental & Behavioral Economics (IMEBE), Barcelona, Spain; International Conference on Behavioral Decision Making, The Interdisciplinary Center Herzliya (IDC), Israel; ICABEEP/IAREP/SABE, Exeter, UK.

2012: Deception, Incentives and Behavior Conference, Rady School of Management, UC San Diego; SABE, Granada, Spain; Industrial Organization, Regulation and Competition Policy in Israel, Tel Aviv University, Israel; The 5th Israel Strategy Conference, Tel Aviv University, Israel.

### **Tomer Blumkin**

#### **Conference presentations**

Cesifo Area Conference on Behavioral Economics, Munich, Germany, October 2011.  
Cesifo Area Conference on Employment and Social Protection, Munich, Germany, May 2012.

#### **Research visits and invited talks**

IZA, Institute for the Study of Labor, Bonn, Germany, October 2011

University of California, San Diego (UCSD), Economics Department, July 2012 (delivering a summer course on the economics of taxation)

Cesifo, Munich Germany, September 2012 (delivering a short graduate course on taxation)

Uppsala University, Center for Fiscal Studies, Uppsala, Sweden, October 2012

### **Danny Cohen-Zada**

T. Alon and D. Cohen-Zada, “The Effect of Religious Schooling on Drug Use,” Annual Meeting of the Israeli Economics Association, May 2012 (session chair).

### **Leif Danziger**

Conference: The Macroeconomics of Financial Market Imperfections and Housing Markets, Mishkenot Sha'nanim, March 2011.

CESifo Area Conference on Employment and Social Protection, Munich, Germany, May 2011.

Seminar at the Institute for the Study of Labor, Bonn, Germany, June 2011.

### **Ezra Einy**

International Conference on Game Theory and Economic Theory, SUNY at Stony Brook, July 2012.

**Koresh Galil**

INFINITI, 2011, Dublin, Ireland, 2011.

**Mark Gradstein**

Mark Gradstein was invited keynote speaker, Annual Meetings of the Asian Law and Economics Association (ASLEA) (2012), Hong Kong.

**Ori Haimanko**

July 2012 – World Congress of the Game Theory Society, Istanbul, Turkey,  
“Approximately Robust Equilibrium.”

September 2012 – Departmental Seminar, Indian Statistical Institute, Delhi,  
“Approximate Robustness of Equilibrium to Incomplete Information.”

**Moshe Justman**

Education Indicators. AERA annual meetings, New Orleans, 2011.

The Public Economics of Creativity. Conference on Economics of Creativity,  
University of Strasbourg, 2012.

Organizing committee. Annual Meeting of the Program on Economics and Society,  
Van Leer Jerusalem Institute, 2011, 2012.

**Oren Rigbi**

Annual Meeting of the American Economic Association, Chicago, IL, January 2012.

Annual Meeting of the European Association for Research in Industrial Economics,  
Rome, Italy, September 2012.

**Bradley Ruffle**

“First-Mover Advantage in Two-Sided Competitions: An Experimental Comparison  
of Role Assignment Rules,” - Rethinking Rationality Workshop, Jerusalem and Beer  
Sheva (January 2012) - Economic Science Association, Tuscon, USA (November  
2012).

**Edna Schechtman**

“Gini Day,” University of Texas, Dallas, February 2012

**Ella Segev**

GAMES 2012, “Sequential All-Pay Auctions,” Istanbul, Turkey.

Invited talk at ORSIS (Israeli Operations Research Society), ATutorial on Game  
Theory.

ORSIS Conference, Operations Research Society of Israel: “n-players Sequential All-  
Pay Auctions.”

**Aner Sela**

Conference: Contests, Mechanisms & Experiments, Exeter, UK, April 2012.

Seminars: University of East Anglia, Exeter University, Cambridge University,  
University College London, Bar-Ilan University.

**Haim Shalit**

“Using the Aumann-Serrano Riskiness Index in Portfolio Analysis,” presented at 49th Meeting of the Euro Working Group on Financial Modeling held in Helsinki, Finland, November 24-26, 2011.

“Testing the Mean-Gini Financial Market Equilibrium Conditions,” presented at 50th Meeting of the Euro Working Group on Financial Modeling held in Rome, Italy May 3-5, 2012.

**Karine van der Beek**

2011 European Historical Economics Society Conference, Dublin.

June 2011: Conference Honoring Professor Joel Mokyr, Evanston, IL.

June 2011: Economics Departmental Seminar, Bar-Ilan University, Ramat Gan.

April 2012: Institute for New Economic Thinking Conference, Berlin, Germany.

May 2012: Seminar at the Department of General History, Ben-Gurion University, Beer Sheva.

May 2012: Seminar at the Economics Department, Hebrew University, Jerusalem.

June 2012: Seminar at the Economics Department, Ben-Gurion University, Beer Sheva.

December 2012: Seminar at the Guilford Glazer Faculty of Business and Management, Ben-Gurion University, Beer Sheva.

**Oscar Volij**

“First-Mover Advantage in Two-Sided Competitions,” presented at the Meetings of the Society for the Advancement of Behavioral Economics, 12-15 July, 2012, Granada, Spain.

“The Atkinson index of Segregation,” presented at the Summer School on Measurement in Economics organized by the University of the Basque Country and the Urrutia Elejalde Foundation - San Sebastián, July 18-20, 2012.

**David Wettstein**

“Innovation Contests” (with Perez-Castrillo, D.), the 22nd International Conference on Game Theory in Stony Brook, U.S., 2011.

**Ro'i Zultan**

Economic Science Association European Meeting, Cologne, Germany, September 2012.

Workshop on *Conflict and Moral Concern*. The Hebrew University of Jerusalem, June 2012.

International Meeting on Experimental and Behavioral Economics (IMEBE), Benicassim, Spain, April 2012.

**V. PUBLICATIONS 2011-12** (names of Center members appear in capital letters)

Abdelfattah, Y., ABU-QARN, A.S., Dunne, P. and Zaher, S. “The Demand for Military Spending in Egypt,” forthcoming in *Defence and Peace Economics*.

ABU-QARN, A.S. “On Defense and Growth of Israel and its Neighbors,” forthcoming in *The Economic Quarterly* (in Hebrew)

ABU-BADER, S. and Gottlieb, D. (2012) "Poverty, Education and Employment among the Arab-Bedouin in Israel." In *Poverty and Social Exclusion around the Mediterranean Sea*, edited by Valerie Bérenger and Florent Bresson, Springer.

ABU-BADER, S. and Gradus, Y. (eds.) (2011) *The Negev Bedouin Statistical Data Book No. 3*. Ben-Gurion University Press.

ARNON, A. and Bamyá, S. (eds.) (2010), [The Aix Group], *Economic Dimensions of a Two State Agreement between Israel and Palestine, Vol. II Supplementary Papers*, (304 pages).

ARNON, A. and Bamyá, S. (eds.) (2012), [The Aix Group], *The Arab Peace Initiative and Israeli-Palestinian Peace: The Political Economy of a New Period*, (560 pages).

ARNON, A. (2011), *Monetary Theory and Policy from Hume and Smith to Wicksell: Money, Credit and the Economy*, Cambridge: Cambridge University Press, 448 pages.

ARNON, A., J. Weinblatt, J. and Young, W. (eds.) (2011) *Perspectives on Keynesian Economics*, Heidelberg: Springer-Verlag, 304 pages.

ARNON, A. (2011), "Keynes, Wicksell and Active Monetary Policy" in Arnon, A., J. Weinblatt, J. and W. Young, W. (eds.), *Perspectives on Keynesian Economics*, Heidelberg: Springer-Verlag, pp. 207-229.

ARNON, A., Weinblatt, J. and Young, W. (2011) "Introduction" in ARNON, A., Weinblatt, J. and Young, W. (eds.), *Perspectives on Keynesian Economics*, Springer-Verlag, pp. 1-11.

ARNON, A. (2011) "Economic Aspects in the Israeli-Palestinian Conflict" in Newman, D. and Peters, J. (eds.), *Routledge Handbook of the Israeli-Palestinian Conflict*, London: Routledge.

AZAR, O.H., Bar-Eli, M. and Yosef, S. "Do Customers Return Excessive Change in a Restaurant? A Field Experiment on Dishonesty," forthcoming in *Journal of Economic Behavior and Organization*.

AZAR, O. H. (2013) "Firm Strategy and Biased Decision Making: The Price Dispersion Puzzle," *Applied Economics*, 45(7):901-910.

Fetchenhauer, D., AZAR, O.H., Antonides, G., Dunning, D., Frank, R.H., Lea, S. and Ölander, F. (2012) "Monozygotic Twins or Unrelated Stepchildren? On the Relationship between Economic Psychology and Behavioral Economics," *Journal of Economic Psychology* 33(3):695-699.

AZAR, O.H. (2012) "What Affects Customer Success When Bargaining for a New Car? Some Empirical Evidence," *Journal of Socio-Economics* 41(1):26-30.

Brock, D.M. and AZAR, O.H. (2012) "The Development of Strategy Research: Evolution of Topics and Article Characteristics," *Contemporary Management Research* 8(1):61-84.

- AZAR, O.H. (2012) "The Effect of the Minimum Wage for Tipped Workers on Firm Strategy, Employees and Social Welfare," *Labour Economics*, 19(5):748-755.
- AZAR, O.H. and Fetchenhauer, D. (2012), "On the Relationship of Economic Psychology and Behavioral Economics," *Journal of Economic Psychology* 33(3):662-664.
- AZAR, O.H. (2011) "Do People Think about Absolute or Relative Price Differences when Choosing between Substitute Goods?" *Journal of Economic Psychology* 32(3):450-457.
- AZAR, O.H. (2011) "Relative Thinking in Consumer Choice between Differentiated Goods and Services and its Implications for Business Strategy," *Judgment and Decision Making* 6(2):176-185.
- AZAR, O.H. (2011) "Business Strategy and the Social Norm of Tipping," *Journal of Economic Psychology* 32(3):515-525.
- AZAR, O.H. (2011) "Does Relative Thinking Exist in Real-World Situations? A Field Experiment with Bagels and Cream Cheese," *Economic Inquiry* 49(2):564-572.
- AZAR, O.H. (2011) "Do Consumers Make Too Much Effort to Save on Cheap Items and Too Little to Save on Expensive Items? Experimental Results and Implications for Business Strategy," *American Behavioral Scientist* 55(8):1077-1098.
- AZAR, O.H. and Bar-Eli, M. (2011) "Do Soccer Players Play the Mixed-Strategy Nash Equilibrium?" *Applied Economics* 43(25):3591-3601.
- BLUMKIN, T, Y. Margalioth, Y. and E. Sadka, E. "The Desirability of Workfare in the Presence of Misreporting," forthcoming in *International Tax and Public Finance*.
- BLUMKIN, T., RUFFLE, B.J. and Ganun, Y. (2012) "Are Income and Consumption Taxes Ever Really Equivalent? Evidence from a Real-Effort Experiment," *European Economic Review* 56:1200-1219.
- Sander, W. and COHEN-ZADA, D. (2012) "Religiosity and Parochial School Choice: Cause or effect?" *Education Economics* 20(5):474-483.
- COHEN-ZADA, D. and JUSTMAN, M. (2012) "Affinity and Tension between Religious Denominations: Evidence from Private School Enrollment," *Regional Science and Urban Economics* 42(6):950-960.
- COHEN-ZADA, D. and Sander, W. (2011) "Religious Participation versus Shopping: What makes people happier," *Journal of Law and Economics* 54(4):889-906.
- Ben-Yashar, R. and DANZIGER, L. (2011) "Symmetric and Asymmetric Committees," *Journal of Mathematical Economics* 47:440-447.

EINY, E., HAIMANKO, O., and Tumendemberel, B. "Continuity of the Value and Optimal Strategies when Common Priors Change," forthcoming in *International Journal of Game Theory*.

BEN-ZION, U., GALIL, K., Rosenboim, M. and Shabtay, H., (2011) A Reexamination of Value Creation through Strategic Alliances, *International Journal of Banking Accounting and Finance* 3, (2/3):133-154.

GALIL, K. and Soffer, G. (2011) "Good News Bad News and Rating Announcements: an Empirical Investigation," *Journal of Banking and Finance* 35:3101-3119.

GRADSTEIN, M., Brueckner, M. and Chong, A. (2012) "Estimating Permanent Income Elasticity of Government Expenditures: Evidence on Wagner's Law Based on Oil Price Shocks," forthcoming in *Journal of Public Economics*.

GRADSTEIN, M. and Chong, A. (2011) "Is the World Flat? Country Level and Firm Level Determinants of Law Compliance," *Journal of Law, Economics, and Organization* 27(2):245-271.

Dubey, P., Geanakoplos, J. and HAIMANKO, O. (2012) "Prizes versus Wages with Envy and Pride," forthcoming in *Japanese Economic Review*.

EINY, E. and HAIMANKO, O. (2011) "Characterization of the Shapley-Shubik Power Index Without the Efficiency Axiom," *Games and Economic Behavior* 73:615-621.

JUSTMAN, M. and Y. Gilboa, Y. (2012) The Scope for Promoting Equal Opportunity in Education: Evidence from the Kibbutz. *Education Finance and Policy* 7:489-515.

RIGBI, O. "The Effects of Usury Laws: Evidence from the Online Loan Market," forthcoming in *The Review of Economics and Statistics*.

RUFFLE, B.J. When Do Large Buyers Pay Less? Experimental Evidence," forthcoming in "*Journal of Industrial Economics*.

Kaplan, T.R. and RUFFLE, B.J. (2012) "Which Way to Cooperate?" *Economic Journal* 122:1042-1068.

Hans-Theo, N. and RUFFLE, B.J. (2011) "Introduction to the Special Issue on Experiments in Industrial Organization," *International Journal of Industrial Organization* 29(1):1-3.

Hans-Theo, N. and RUFFLE, B.J. (2011) "Introduction to the Special Issue on Experiments in Industrial Organization," *International Journal of Industrial Organization* 29(1):1-3.

SCHECHTMAN, E., Yitzhaki, S. and Pudalov, T. (2011) "Gini's Multiple Regressions: two approaches and their interaction." *Metron* LXIX(1):65-99.

- Yitzhaki, S. and SCHECHTMAN, E. (2012) "Identifying Monotonic and Non-monotonic Relationships." *Economics Letters* 116:23-25.
- Gayer, G. and SEGEV, E "Revealing Private Information in Bargaining," forthcoming in *The BE Journal of Theoretical Economics*.
- Schweitzer, P. and SEGEV, E. (2012) "The Optimal Prize Structure of Symmetric Tullock Contests," *Public Choice* 153(1):69-82.
- Groh, C., Moldovanu, B, SELA, A. and Sunde, U. (2012) "Optimal Seeding in Elimination Tournaments," *Economic Theory* 49:59-80.
- SELA, A. (2012) "Sequential Two-Prize Contests," *Economic Theory* 51(2), 2012, 383-395.
- Moldovanu, B., SELA, A. and Shi, X. (2012) "Carrots and Sticks: Prizes and Punishments in Contests," *Economic Inquiry* 50(2):453-462.
- Aloni, E. and, SELA, A. (2012) "The Assortative Matching Scheme in a Survival Battle," *Economics Letters* 117:272-275.
- Moldovanu, B., SELA, A. and Shi, X. (2012) "Carrots and Sticks: Prizes and Punishments in Contests," *Economic Inquiry* 50(2):453-462.
- SHALIT, H. and Greenberg, D., "Hedging with Stock Index Options: A Mean-Extended Gini Approach", forthcoming in *Journal of Mathematical Finance*.
- SHALIT, H. (2012) "Using OLS to Test for Normality," *Statistics & Probability Letters* 82(11):2050-2058.
- de la Vega, C.L., Urrutia, A. and VOLIJ, O. (2012) "An Axiomatic Characterization of the Theil Inequality Ordering," forthcoming in *Economic Theory*.
- VOLIJ, O. and Frankel, D (2011) "Measuring School Segregation," *Journal of Economic Theory* 146:1-38.
- de Clippel, G., Perez-Castrillo, D. and WETTSTEIN, D. "Egalitarian Equivalence under Asymmetric Information," *Games and Economic Behavior* 75(1):413-423.
- ZULTAN, R. "Timing of Messages and the Aumann Conjecture: A Multiple Selves Approach," forthcoming in *International Journal of Game Theory*.
- ZULTAN, R., Gerstenberg, T. and Lagnado, D. A. (2012) "Finding Fault: Causality and Counterfactuals in Group Attributions," *Cognition* 125:429-440.

**VI. WORKING PAPER SERIES 10/11/12 AND  
ABSTRACTS OF RECENT WORKING PAPERS  
(issued from the Monaster Center for Economic Research)**

**Discussion Paper Series 2010**

- 10-01 B.J. Ruffle, A. Weiss and A. Etziony, "Coordination and Critical Mass in Network Market: An Experimental Investigation."
- 10-02 B.J. Ruffle and R. Sosis, "Do Religious Contexts Elicit More Trust and Altruism? An Experiment on Facebook."
- 10-03 A. S. Abu-Qarn, "The Defence-Growth Nexus Revisited: Evidence from the Israeli-Arab Conflict."
- 10-04 E. Einy and O. Haimanko, "Characterization of the Shapley-Shubik Power Index Without the Efficiency Axiom."
- 10-05 O. Hochman, "Efficient Agglomeration of Spatial Clubs."
- 10-06 B. Ruffle and Z. Shtudiner, "Are Good-Looking People More Employable?"
- 10-07 R. Megidish and A. Sela, "Caps in Sequential Contests."
- 10-08 R. Megidish and A. Sela, "Allocation of Prizes in Contests with Participation Constraints."
- 10-09 E. Erez and A. Sela, "Round-Robin Tournaments with Effort Constraints."
- 10-10 M. Malul, M. Rosenboim, and T. Shavit, "The Role of Employment Protection during an Exogenous Shock to an Economy."
- 10-11 H. Shalit, "Portfolio Risk Management Using the Lorenz Curve."

**Discussion Paper Series 2011**

- 11-01 P. Dubey, J. Geanakoplos, and O. Haimanko, "Prizes versus Wages with Envy and Pride."
- 11-02 I. Bakalyar and K. Galil, "Rating Shopping and Rating Inflation: Empirical Evidence from Israel."
- 11-03 C.L. de la Vega, A. Urrutia, and O. Volij, "An Axiomatic Characterization of the Theil Inequality Ordering."
- 11-04 M. Gradstein, "Dictatorship, Democratic Transitions, and Development."
- 11-05 T.R. Kaplan and B.J. Ruffle, "Which Way to Cooperate."
- 11-06 E. Segev and A. Sela, "Sequential All-Pay Auctions with Head Starts and Noisy Outputs."

- 11-07 R. Zultan, "Strategic and Social Pre-Play Communication in the Ultimatum Game."
- 11-08 E.-M. Steiger and R. Zultan, "See No Evil: Information Chains and Reciprocity in Teams."
- 11-09 R. Zultan, "Timing of Messages and the Aumann Conjecture: A Multiple-Selves Approach."

### **Discussion Paper Series 2012**

- 12-01 D. Cohen-Zada and T. Elder, "Religious Pluralism, Religions Market Shares and the Demand for Religious Schooling."
- 12-02 Z. Afik, O. Arad and K. Galil, "Using the Merton Model: an empirical assessment of alternatives."
- 12-03 R. Abramitzky, L. Einav and O. Rigbi, "Is Hanukkah Responsive to Christmas?"
- 12-04 O. Rigbi, "The Effects of Usury Laws: Evidence from the Online Loan Market."
- 12-05 J. Meer and O. Rigbi, "Transactions Costs and Social Distance in Philanthropy: Evidence from a Field Experiment."
- 12-06 I. Ater and O. Rigbi, "Price Control in Franchised Chains: The Case of McDonald's Dollar Menu."
- 12-07 N.E. Feldman and B.J. Ruffle, "The Impact of Tax Exclusive and Inclusive Prices on Demand."
- 12-08 B.J. Ruffle and O. Volij, "First-Mover Advantage in Two-Sided Competitions: An Experimental Comparison of Role-Assignment Rules."
- 12-09 O. Haimanko, "Approximate Robustness of Equilibrium to Incomplete Information."
- 12-10 Y.M. Abdelfattah, A.S. Abu-Qarn, J. Paul Dunne and S. Zaher, "The Demand for Military Spending."
- 12-11 E. Segev and A. Sela, "Multi-Stage Sequential All-Pay Auctions."
- 12-12 R. Megidish and A. Sela, "Sequential Contests with Synergy and Budget Constraints."
- 12-13 O. Hochman, "Welfare Estimation in a General Equilibrium Model with Cities."

**ABSTRACTS OF DISCUSSION PAPERS** (issued since the previous report)**RELIGIOUS PLURALISM, RELIGIOUS MARKET SHARES  
AND THE DEMAND FOR RELIGIOUS SCHOOLING**

Danny Cohen-Zada and Todd Elder

Discussion Paper No. 12-01

We develop a model of school choice in which the demand for religious schooling is driven partly by the desire of parents to limit their children's exposure to the influences of competing religions. This framework links the literature on the effects of religious market shares on the within-denomination intensity of religious activity with a separate literature relating religious pluralism to the overall level of religious participation. The model predicts that when a religious group's share of the local population grows, the fraction of that group's members whose children attend religious schools decreases. In addition, it implies that the overall demand for religious schooling is a positive function of both the local religiosity level and the level of religious pluralism, as measured by a Herfindahl Index. Using both U.S. county-level data and individual data from ECLS-K and NELS:88, we find evidence strongly consistent with the model's predictions. Our findings also illustrate that failing to control for the local religiosity level in estimating the effect of religious pluralism on religious participation, as is common in previous studies, may lead a researcher to erroneously conclude that pluralism has a negative effect on participation.

**USING MERTON'S MODEL:  
AN EMPIRICAL ASSESSMENT OF ALTERNATIVES**

Zvika Afik, Ohad Arad and

Koresh Galil

Discussion Paper 12-02

Merton (1974) suggested a structural model for default prediction which allows using timely information from the equity market. The literature describes several specifications to the application of the model, including methods presumably used by practitioners. However, recent studies demonstrate that these methods result in inferior estimates compared to simpler substitutes. We empirically examine various specification alternatives and find that the prediction goodness is only slightly sensitive to different choices of default barrier, whereas the choice of assets expected return and assets volatility is significant. Equity historical return and historical volatility produce unbiased estimates for assets expected return and assets volatility, especially for defaulting firms. Acknowledging these characteristics, we suggest specifications that improve the model's accuracy.

**IS HANUKKAH RESPONSIVE TO CHRISTMAS?**

Ran Abramitzky, Liran Einav, and Oren Rigbi

Discussion Paper 12-03

We study the extent to which religious activity responds to the presence and activity of other religions. Specifically, we employ individual-level survey data and county-level expenditure data to examine the extent to which Hanukkah celebration among U.S. Jews is driven by the presence of Christmas. We find that (1) Jews with children at home are more likely to celebrate Hanukkah than Jews without children; (2) The correlation of having children at home with Hanukkah celebration is higher for reform Jews than for orthodox Jews, and is higher for strongly-identified Jews. In

contrast, this differential correlation is not present for other Jewish holidays; (3) Jewish-related expenditures in Hanukkah are higher in counties with lower share of Jews and in counties with higher share of Catholics. All these findings are consistent with an hypothesis that celebration of religious holidays is designed not only to worship and enjoy, but also to provide a counterbalance for children against competing cultural influences.

**THE EFFECTS OF USURY LAWS:  
EVIDENCE FROM THE ONLINE LOAN MARKET**

Oren Rigbi

Discussion Paper 12-04

Usury laws cap the interest rates that lenders can charge. Using data from Prosper.com (an online lending marketplace), I show how interest rate caps affect: 1) the probability that a loan is funded; 2) the amount a borrower requests; 3) the interest rate at which a loan is funded; and 4) loan repayments. The key to my empirical strategy is that there initially was substantial variability in states' interest rate caps, according to which Prosper borrowers from different states faced caps ranging from 6 to 36%. A behind-the-scenes change in loan origination, however, suddenly increased the cap to 36% in all but one state. This change, which was not pre-announced, creates “treatment” states where caps rose and a few control states where caps remained unchanged. I find that higher interest rate caps increase the probability that a loan will be funded, especially if the borrower is risky and previously was just “outside the money.” I do not find, however, that borrowers change the loan amounts they request or that their probability of default rises. On the other hand, the interest rate paid rises slightly, probably because online lending is substantially, yet imperfectly, integrated with the general credit market.

**TRANSACTIONS COSTS AND SOCIAL DISTANCE IN PHILANTHROPY:  
EVIDENCE FROM A FIELD EXPERIMENT**

Jonathan Meer and Oren Rigbi

Discussion Paper No. 12-05

The importance of various motivations for altruistic behavior is still an open question. We use data from a field experiment at Kiva, the online microfinance platform, to examine the role of transactions costs and social distance in philanthropy. Requests for loans are either written in English or another language, and our treatment consists of posting requests in the latter category with or without translation. We find evidence that relatively small transactions costs have a large effect on the share of funding coming from speakers of languages other than that in which the request was written. Social distance plays a smaller role in funding decisions. Additionally, our results demonstrate the importance of a *lingua franca*.

**PRICE CONTROL IN FRANCHISED CHAINS: THE CASE OF McDONALD'S  
DOLLAR MENU**

Itai Ater and Oren Rigbi

Discussion Paper No. 12-06

We analyze price patterns at franchised and corporate-owned McDonald's outlets in 1999 and 2006 and find that prices at franchised outlets were higher than those at corporate outlets. The price difference between franchised and corporate outlets

decreased between 1999 and 2006 but only for items with close substitutes in the Dollar Menu, which was introduced in 2002. We also find that the price difference between franchised and corporate outlets was higher among outlets located near highways than among non-highway locations. After the Dollar Menu was introduced, this highway - non-highway difference diminished. Our findings suggest that the Dollar Menu improved McDonald's corporation's control over franchisees' prices.

**THE IMPACT OF TAX EXCLUSIVE AND INCLUSIVE  
PRICES ON DEMAND**

Naomi E. Feldman and  
Bradley J. Ruffle  
Discussion Paper No. 12-07

We test the equivalence of tax-inclusive and tax-exclusive prices through a series of experiments that differ only in their handling of the tax. Subjects receive a cash budget and decide how much to keep and how much to spend on various attractively priced goods. Subjects spend significantly more when faced with tax-exclusive prices. This treatment effect is robust to different price levels, to initial shopping-cart purchases and persists throughout most of the ten rounds. A goods-level analysis, intra-round revisions as well as results from a third tax-deduction treatment all cast doubt on salience as the source of our findings.

**FIRST-MOVER ADVANTAGE IN TWO-SIDED COMPETITIONS:  
AN EXPERIMENTAL COMPARISON OF ROLE-ASSIGNMENT RULES**

Bradley J. Ruffle and Oscar Volij  
Discussion Paper 12-08

Kingston (1976) and Anderson (1977) show that the probability that a given contestant wins a best-of- $2k+1$  series of asymmetric, zero-sum, binary-outcome games is, for a large class of assignment rules, independent of which contestant is assigned the advantageous role in each component game. We design a laboratory experiment to test this hypothesis for four simple role-assignment rules. Despite the fact that play does not uniformly conform to the equilibrium, our results show that the four assignment rules are observationally equivalent at the series level: the fraction of series won by a given contestant and all other series outcomes do not differ across the four rules.

**APPROXIMATE ROBUSTNESS OF EQUILIBRIUM TO  
INCOMPLETE INFORMATION**

Ori Haimanko and Atsushi Kajii  
Discussion Paper 12-09

We relax the Kajii and Morris (1997a) notion of equilibrium robustness by allowing approximate equilibria in close incomplete information games. The new notion is termed “approximate robustness.” The approximately robust equilibrium correspondence turns out to be upper hemicontinuous, unlike the (exactly) robust equilibrium correspondence. As a corollary of the upper hemicontinuity, it is shown that approximately robust equilibria exist in all two-player zero-sum games and all two-player two-strategy games, whereas (exactly) robust equilibria may fail to exist for some games in these categories.

### **THE DEMAND FOR MILITARY SPENDING**

Yasmine M. Abdelfattah, Aamer S. Abu-Qarn, J. Paul Dunne and  
Shadwa Zaher  
Discussion Paper 12-10

Egypt plays a pivotal role in the security of the Middle East as the doorway to Europe and its military expenditure reflects its involvement in the machinations of such an unstable region, showing considerable variation over the last forty years. These characteristics make it a particularly interesting case study of the determinants of military spending. This paper specifies and estimates an econometric model of the Egyptian demand for military spending, taking into account important strategic and political factors. Both economic and strategic factors are found to play a role in determining military burden/spending, with clear positive effects of lagged military burden, suggesting some sort of institutional inertia, plus negative output and net exports effects. The strategic effect as a result of the impact of Israel's military burden is mostly positive and significant, though its impact is reduced when the impact of important strategic events are taken into account. The military spending of Egypt's allies Jordan and Syria generally seems to have had no effect on Egypt's spending. These results are consistent over a range of econometric techniques.

### **MULTI-STAGE SEQUENTIAL ALL-PAY AUCTIONS**

Ella Segev and Aner Sela  
Discussion Paper 12-11

We study multi-stage sequential all-pay contests (auctions) where heterogeneous contestants are privately informed about a parameter (ability) that affects their cost of effort. We characterize the Perfect Bayesian equilibrium of these multi-stage sequential all-pay contests and analyze the effect of the number of contestants, their types, and their order on the expected highest effort.

### **SEQUENTIAL CONTESTS WITH SYNERGY AND BUDGET CONSTRAINTS**

Reut Megidish and Aner Sela  
Discussion Paper 12-12

We study a sequential Tullock contest with two stages and two identical prizes. The players compete for one prize in each stage and each player may win either one or two prizes. The players have either decreasing or increasing marginal values for the prizes, which are commonly known, and there is a constraint on the total effort that each player can exert in both stages. We analyze the players' allocations of efforts along both stages when the budget constraints (effort constraints) are either restrictive, non-restrictive or partially restrictive. In particular, we show that when the players are either symmetric or asymmetric and the budget constraints are restrictive, independent of the players' values for the prizes, each player allocates his effort equally along both stages of the contest.

## WELFARE ESTIMATION IN A GENERAL EQUILIBRIUM MODEL WITH CITIES

Oded Hochman

Discussion Paper 12-13

We show that current measures of welfare changes which are all based on the compensated variation (CV) and the equivalent variation (EV) do not apply to an economy with cities. In addition, since these measures are utilized in a partial equilibrium analysis they capture only part of the effect of a welfare change. We then define measures appropriate for an urban economy in a general equilibrium framework. We first construct for each city a cost function from which we derive a city's and, after aggregation, the economy's, demand functions. These demands are functions of nationwide prices and of either the unearned incomes (Marshallian demand curves) or of the utility levels (compensated demand curves). From the same cost functions we also derive the Marshallian and compensated supply curves. Each point on a Marshallian demand curve is an allocation designated by the price vector and the unearned income vector. An allocation is either in perfect equilibrium, when the marginal cost in each market is equal to the market price or, if the marginal cost differs from the market price in some markets, the allocation is in imperfect equilibrium and is inefficient. Imperfect markets can be improved by moving to other allocations on the same Marshallian demand function. We construct modified versions, such as *mCV* and *mEV*, of the welfare measures *CV* and *EV*, from which we define the modified economic surplus (*mES*) as the ultimate welfare measure. The *mES* is equal to the willingness to pay for the added product produced (i.e., the area between the Marshallian demand curve and the quantity-axis), minus the added costs of production in current prices and wages, and plus the change in the differential land rents (DLR) in the cities producing the good. The analysis is then extended to cases in which more than one market price changes. We also estimate secondary effects in imperfect markets in which the market price remains constant while the price in the primary market changes.

## VII. RESEARCH SUMMARIES OF CENTER MEMBERS

### **Suleiman Abu-Bader**

Dr. Abu-Bader's research interests deal with the application of econometric techniques to study macroeconomic relations. He investigates growth-related issues in the Middle East as well as the relationship between economic growth, globalization, income inequality, and poverty in developing countries. His current research is focused on studying those factors which explain the differences in income inequality levels and changes over time of the Bedouin in the Negev and of the Palestinians in the West Bank and Gaza Strip.

### **Aamer Abu-Qarn**

Dr. Abu-Qarn focuses his research on the determinants of economic growth in general and on the MENA region in particular. To accomplish this, he applies both time series techniques and panel data methods. He also examines various aspects of the Israeli-Arab conflict, including testing for structural breaks in military expenditures, the existence of the arms race, and the relationship between defense and economic growth. Recently, he has focused on the determinants of labor force participation of Arab females.

### **Arie Arnon**

Arie Arnon's research interests primarily deal with macroeconomics, monetary theory and policy, and the Israeli economy with particular emphasis on the labor market. In

recent years the focus of the research was on the history of economic thought, the outcome of which was the publication of a monograph “*Money, Banking and the Economy: Monetary Theory from Hume and Smith to Wicksell*” by Cambridge University Press. Prof. Arnon is currently working on a new monograph entitled (provisionally) “Keynes(ians) and Hayek(ians) on Cycles, Crises and Economic Policy: Some Major Trends in Macroeconomics Thinking From the Great Depression to the Long Recession.” Prof. Arnon also continues to be actively involved in regional economics and research on economic policies in the Middle East, particularly on the Israeli-Palestinian relations. Since 2002 he has been the Israeli Coordinator of “The Aix Group” – a Working Research Group on the Economic Dimensions of the Israeli Palestinian conflict. In 2005 he initiated the “Program on Economics and Society” at the Van Leer Jerusalem Institute which he headed until 2011.

### **Ofer Azar**

Ofer Azar’s main research areas are industrial organization, strategy, behavioral economics, and experimental economics. Recently, Prof. Azar’s research has focused in particular on several topics. One was to examine, using experiments, how people make decisions between differentiated products and how workers respond to certain types of incentives. Another was to analyze how firm strategy should respond to the consumer bias of “relative thinking.” Some other recent research analyzed the behavior and decision making of sports players, and the willingness of restaurant customers to report excessive change.

### **Tomer Blumkin**

Tomer Blumkin’s research continued to focus on normative issues related to the design of the tax and transfer system. Two recent articles in particular, that incorporate migration considerations into a tax competition framework and examine the restraining effect of migration on the extent of re-distribution, demonstrated that marginal tax rates levied on top-earners may be quite low even when invoking a highly egalitarian social objective.

### **Danny Cohen-Zada**

Dr. Cohen-Zada’s research deals with both the economics of education and the economics of religion. Currently, he is studying how religious pluralism affects the demand for religious schooling and how religiosity affects donations. In another project he estimates the treatment effect of religious schooling in Israel on student outcomes and drug use. He also studies whether students are allocated into classes in a compensatory or a regressive manner.

### **Leif Danziger**

Prof. Danziger’s research concentrates on the following subject areas: (1) the output and welfare effects of a minimum wage; (2) the design and implications of labor contracts; (3) the macroeconomic consequences of adjustment costs; and (4) the properties of voting mechanisms.

### **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 present focus is on solution concepts of economies with differential information.

**Koresh Galil**

Dr. Galil's research interests focus on empirical finance and credit risk. His current projects include empirical examination of several alternatives for application of Merton's (1974) model for prediction of default, information content of sovereign ratings, rating shopping, properties of credit spreads, informed trading prior to default events and anomalies in credit derivatives markets.

**Mark Gradstein**

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

**Ori Haimanko**

Prof. Haimanko's currently studies robustness of equilibria and continuity of equilibrium correspondences in games with incomplete information; competitive contracts in multi-agent settings with differential skills; and axiomatizations of monotonic values of cooperative games.

**Moshe Justman**

Prof. Justman's current research focuses on the economics of education.

**Israel Luski**

Prof. Luski's research interests deal with the following areas of industrial organization: R&D and patent policy – optimal strategies for R&D investment; the economics of multinational corporations – the economic impact of multinational corporations on the host country; optimal incentives policy; nonprofit organizations – economic efficiency of nonprofit organizations, and government policy toward nonprofit organizations.

**Oren Rigbi**

Dr. Rigbi's main research interests are applied microeconomics and industrial organization. Much of his time is devoted to investigating the economics of alternative credit markets including person-to-person markets and online charitable giving markets in developed and developing countries. In addition, he explores how the structure of law enforcement agencies affects their activities and crime.

**Bradley Ruffle**

Prof. Ruffle is primarily 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 cooperation, trust, signaling, emotions, and cognitive biases in interactive and individual decision making. He also uses rational choice theories to understand religiosity and religious institutions.

**Edna Schechtman**

Prof. Schechtman's research is directed towards the use of Gini in various areas of statistics, starting with the Gini correlation, moving to Gini's simple and multiple regressions and finally analysis of Gini (ANOVI). Another direction is using Gini for time series data by replacing the variance and its related parameters by the Gini and its related parameters.

**Ella Segev**

Dr. Segev applies game theoretic tools for the analysis of economic situations such as contests, auctions and bargaining in order to describe equilibrium behavior in these situations and design optimal mechanisms.

**Aner Sela**

Prof. Sela's research concerns optimal designs of contests and auctions.

**Haim Shalit**

Prof. Shalit's research is directed toward the use of the mean-Gini model and Conditional Stochastic Dominance in financial markets. His research with Prof. Shlomo Yitzhaki of the Central Bureau of Statistics on the mean-Gini model has shown how risk aversion affects the essence of capital markets equilibrium. Prof. Shalit is presently using new riskiness measures to quantify risk in Mutual Funds and portfolios.

**Avia Spivak**

Prof. Spivak continues his research activities in two main fields of interest: the macro economics of Israel and the economics of pensions and social insurance.

**Karine van der Beek**

Dr. van der Beek's research interests include economic history, growth and institutions. She mainly focuses on industrialization, technological change and the evolution of human capital in pre-modern Europe. Her current research project explores the skilled labor sector in England during the Industrial Revolution.

**Oscar Volij**

Prof. Volij does research in economic theory and game theory. His current projects involve the measurement of segregation, income inequality, and two-sided competitions.

**David Wettstein**

Prof. Wettstein focuses on the introduction of new solution concepts for cooperative environments with externalities and asymmetric information, as well as on the non-cooperative foundations for old and new cooperative solution concepts and optimal auction design.

**Ro'i Zultan**

Dr. Zultan studies normative and descriptive issues of individual decision making using the tools of game theory and experimental economics. His primary interests are cooperation in social environments and the effects of communication on behavior.