Program Overview

Thursday, June 28, 2018

- 18:00 to 21:00: ESA Welcome Reception, Lobby and Courtyard

Friday, June 29, 2018

- 9:00-10:15: Welcome and Keynote, 201 and 202 (live broadcast)
- 10:15-10:45: Coffee Break, Lobby and Second Floor
- 10:45-12:15: Parallel Sessions I
- 12:15-14:00: Lunch Break
- 14:00-15:30: Parallel Sessions II
- 15:30-16:00: Coffee Break, Lobby and Second Floor
- 16:00-17:30: Parallel Sessions III
- 18:30-22:30: Conference Dinner

Saturday, June 30, 2018

- 9:30-11:00: Parallel Sessions IV
- 11:00-11:30: Coffee Break, Lobby and Second Floor
- 11:30-13:00: Parallel Sessions V
- 13:00-14:30: Lunch Break (with board meeting)
- 14:30-15:45: Policy Panel, 201 and 202 (live broadcast)
- 15:45-16:15: Coffee Break, Lobby and Second Floor
- 16:15-17:45: Parallel Sessions VI
- 18:00-19:00 ESA Membership Meeting, 201

Sunday, July 1, 2018

- 9:00-10:30: Parallel Sessions VII
- 10:30-11:00: Coffee Break, Lobby and Second Floor
- 11:00-12:30: Parallel Sessions VIII
- 12:30-14:00: Lunch Break and Mentoring Session, 201
- 14:00-15:15: BERA plenary lecture, 201 and 202 (live broadcast)

Conference Parallel Sessions

June 29th, 10:45 - 12:15

Session 1, 201: Honesty, Lying, and Cheating (SHORT)

- Simon Halliday, Honesty at the Margin: Experiments on the Dynamics of Deception
- Marie-Claire Villeval, Homophily, peer effects and dishonesty
- Billur Aksoy, The Effect of Scarcity on In-Group Bias in Pro-Social and Moral Behavior: Evidence from Coffee Farmers in Guatemala
- Georgia Michailidou, Interdependent Lying Costs: Theory and Experimental Evidence
- Roel van Veldhuizen, Bribing the Self
- Lilia Zhurakhovska, Endogenous Leadership and (Dis)honest Behavior
Session 2, 202: Trust and Cooperation (SHORT)

- Daniel Mueller, Distributional Preferences Explain Individual Behavior Across Games and Time
- Sascha Fullbrunn, Trust under financial distress
- Aljaz Ule, Dilution Illusion
- Dennis A. V. Dittrich, Intergenerational Cooperation: an Experimental Study of Ageism in Trust and Exploitation
- Susanna Grundmann, Money Illusion and Intentions in an Experimental Labour Market
- Johannes Leutgeb, Learning and Reciprocity in Adjustments
- Karim Sadrieh, Universal Difference Aversion
- Federica Alberti, Strategic use of facial expressions in trust games
- J. Philipp Reiss, (Non-)cooperation preferences and destruction behavior

Session 3, 203: Coordination and Bargaining (SHORT)

- Duk Gyoo Kim, Multilateral Bargaining with Costly Recognition: An Experiment
- Toshiji Kawagoe, Risk Dominance vs. Boundedly Rationality in Asymmetric Volunteer's Dilemma
- Kei Tsutsui, Negative reciprocity in bribery game
- Aaron Kamm, What Causes Gamson's Law? Experimental Evidence on Coalitional Bargaining and Commitment
- Carles Sola, Coordination in volatile environments with time constraints and heterogeneities
- Konstantinos Georgalos, Testing the Presence of Strategic Uncertainty in Multi-Stage Games
- Philippos Louis, Beyond Outcomes: Experimental Evidence on the Value of Agreement
- Todd Kaplan, Information Disclosure and Bank Runs: An Experimental Study
- Jasmina Arifovic, Teaching to Alternate and the Theory of Mind

Session 4, 220: Psychology and Biology (SHORT)

- Astrid Hopfensitz, Emotional expressions by sports teams: an analysis of world cup soccer player portraits
- Natalia Candelo Londono, When Palm Reading Fails To Correlate With Economic Behavior
- marine hainguerlot, Perceptual overconfidence and suboptimal use of symbolic cues: A theoretical and empirical analysis
- Svenja Hippel, Testing the Informational Robustness of a Public Good Mechanism
- Levent Neyse, Social Comparisons in the Public Goods Game
- Manja Gaertner, Inducing cooperation: who is affected?
- Fanny Brun, Psychological depreciation and food waste
- Holger Gerhardt, The Effects of Short-Term Food-and-Water Deprivation on Cooperation
- Alessandra Cassar, Improvements in Sanitary Products for Menstruation and Female Outcomes

Session 5, 125: Decision Theory (SHORT)

- Thomas de Haan, A new method to elicit probability distribution beliefs
- Abigail Hurwitz, Anchoring bias in annuity choices: An experimental investigation
- John Smith, Judgments of extent in the economics laboratory: Are there brains in choice?
- Angela Sutan, The strategic environment effect in beauty contest games
- Therese Lind, Preferences for integrated gains and segregated losses - A contradicting case of prospect theory?
- Florian Hett, Pushing Through or Slacking Off? Heterogeneity in the Reaction to Rank Feedback
- John Stovell, Utility maximization with sensory limitations: theory and evidence
- Paul Healy, Probability Matching and Randomization in Lottery Choice and Games
- Elena Cettolin, Cortisol Meets GARP: The Effect of Stress on Economic Rationality

Session 6, 22: Group Behavior
Session 7, 23: Public Goods 1: Institutions

- Dmitri Bershadskyy, Reverberation Effect of an Efficient Institution
- Karen Hauge, The good, the bad and the conditional: Sustaining cooperation through self-sorting
- Louis Putterman, Civic Engagement as a Second-Order Public Good: An Experiment
- Sven Fischer, Cooperation under heterogeneous preferences with voting

Session 8, 21A: Field Experiments 1

- Nor Izzatina Abdul Aziz, Representative Leadership and Social Status: Experimental Evidence from Borneo
- J Cristobal Ruiz-Tagle, Reducing Air Pollution Through Behavioral Change of Woodstove Users: Evidence from an RCT in Valdivia, Chile
- Kanittha Tambunlertchai, Regulatory Stringency and Compliance Behavior in Common Pool Resource Game: Lab and Field Experiments

Session 9, 21B: Norms 1

- Pushkar Maitra, Judging Actions: Social Norms, Gender and Third Party Punishments
- Robert Schmidt, Measuring heterogeneity of social norm perception on the individual level
- Sigve Tjotta, You'll Never Walk Alone: An Experimental Study on Receiving Money
- Eugen Dimant, Feel the Power of the Dark Side: On the Evolution of Norm Erosion

Session 10, 112: Individual Differences

- Efsan Nas Ozen, Detail-Oriented Women Wanted: The roles of gender and socio-emotional skills signals in the labor market
- Patrick Ring, First Food, then Morals - The Effect of Food-Deprivation on Social Preferences
- Chiara Rapallini, Personality Traits and Household Consumption Choices
- Andreas Ortmann, The Effect of Personality Traits on Productivity: Replication and Extension

June 29th, 14:00 - 15:30

Session 1, 201: Gender and Discrimination (SHORT)

- Menusch Khadjavi, Ride with Me - Ethnic Discrimination, Social Markets and the Sharing Economy
- Urs Fischbacher, Trapped in homogeneity? Performance estimates and gender composition
- Tarek-Taher Jaber-Lopez, Gender, competition and the effect of feedback and choice of task: An experimental analysis
- Eva Ranehill, Do Gender Preference Gaps Impact Policy Outcomes?
- Barbora Baisa, Group Membership and Gender Competitiveness
- Hirofumi Kurokawa, In-group Bias and Willingness to Compete
- Arthur Schram, Revisiting the Gender Effects of Competition: Social Status Concerns and Rivalry for Resources are Substitutes
- Klarita Gerxhani, Status-Ranking Aversion

Session 2, 202: Methodology (SHORT)

- Dirk Engelmann, Fairness in Markets and Market Experiments
Session 3, 203: Behavior in Financial Markets and Incentives in Health Behavior (SHORT)

- Martina Vecchi, Food Rewards: Does using food as a reward change food preferences?
- Orly Sade, Out-of-Pocket vs. Out-of-Profit in Financial Advisory Fees: Evidence from the Lab
- Agnes Pinter, Does risk sorting explain bubbles?
- Christoph Huber, Reducing Mispricing in Bubble-prone Experimental Asset Markets
- Stephanie Rosenkranz, The winner takes it all, the loser's standing small: Social status and risk-taking in the Finance Industry
- Ciril Bosch-Rosa, Behavioral Investors?
- Julia Rose, Unknown Probabilities and Unknown Outcomes: The Effect of twofold Ambiguity on Market Prices
- Olivia Rusch, A Contingency Management Smoking Cessation Programme: Experimental Evidence From A Developing Country
- Lionel Page, How much information is incorporated in financial asset prices? Experimental Evidence

Session 4, 220: Charitable Giving (SHORT)

- Christian Johannes Meyer, Sorting Into Incentives for Prosocial Behavior
- Maja Adena, Voluntary donations and reward oriented contributions: A field experiment on framing in a donation-based crowdfunding campaign
- Mario Mechtel, The effect of information on dictator game giving towards an outgroup of refugees: A field experiment
- Franziska Tausch, The Customer as Donor: An Online Experiment on Sydney Opera House Sales and Donations
- Adriaan Soetevent, Promises undone: How committed pledges impact donations to charity
- Stefan Traub, Recognition of needs in a dictator game: Experimental evidence on information-sensitive giving behavior
- Ragan Petrie, Optimal Incentives to Make a Charitable Donation
- Patricio Dalton, Charitable Giving and Socioeconomic Status: Experimental Evidence from Bogota Stratification

Session 5, 125: Other-regarding Preferences 1

- Felix Koelle, Present-Biased Generosity: Dynamic Inconsistency and Social Preferences in Effort Allocation Tasks
- Johanna Mollerstrom, A Meritocratic Origin of Egalitarian Behavior
- Pauline Vorjohann, Welfare-based altruism
- Giang Tran, Intertemporal Social Preferences

Session 6, 22: Decision Making

- Moritz Janas, Delegation to a Group of Experts
- Christoph Buhren, Strategic Nudging in the Beauty Contest Game
- Lara Ezquerra, Deciding to delegate: on distributional consequences of Endogenous (and Compulsory) Delegation
- Gonul Dogan, What Makes Pyramid Schemes Work?
Session 7, 23: Narratives and Hypocrisy

- Eugenio Verrina, *Stories We Tell: Self-serving beliefs and the effect of narratives on moral decision making*
- Adrian Hillenbrand, *The differential effect of narratives*
- Bernd Irlenbusch, *Adam & Eve's Legacy: Using Fig Leaves As Hypocritical Covers- An Experimental Investigation Into Economic Consequences*

Session 8, 21A: Markets 1

- Maria Bigoni, *Money is more than memory*
- Peter Werner, *CO2 Trading: Design and Behavior*
- Utz Weitzel, *Bubbles and Financial Professionals*
- Peter Katuscak, *Strategy-Proofness Made Simple*

Session 9, 21B: Preferences 1

- Marco Fabbri, *How Institutions Shape Preferences: Experimental Evidence from a Land Tenure Reform Implemented as a Randomized Control-Trial*
- Shohei Yamamoto, *The Endowment Effect in the Future: How Time Shapes Buying and Selling Prices*
- Marcela Ibanez, *Higher Order Risk: An Application To Savings of the Poor in Bogota*
- Yi-Shan Lee, *Revealed Privacy Preferences: Are Privacy Choices Rational?*

Session 10, 112: Games and Markets

- Jesal Dilip Sheth, *The persistent nature of naivety about hidden information: An experimental investigation*
- Jacopo Magnani, *Matching under Imperfect Information: An Experimental Study*
- Alexander Neverov, *Information-processing styles in the presence of abundant information: An experimental analysis*

Session 11, BG 08: Risk 1

- Morten Lau, *Evaluating the Welfare Cost of Gambling with Field Experiments in Denmark*
- Felix Holzmeister, *Within-subject (in)consistency across different risk elicitation methods*
- Jan Krause, *An explanation for the equity premium puzzle based on differential discounting in the gain and loss domain*
- daana arroyos-calvera, *The Common Ratio Effect in Monetary and Non-monetary Domains*

Session 12, BG 13: Social Behavior and Lying

- Tim Lohse, *Compliance in teams : Implications of joint decisions and shared consequences*
- Andrej Angelovski, *Telling the Other what One Knows? Mutually Truthful or Mutually Lying: Cheap-Talk in Modified Acquiring-a-Company Experiments*
- Manwei Liu, *The relativity of image in moral decision making*
- Viola Ackfeld, *Personal Information Disclosure under Competition for Benefits: Is Sharing Caring?*

**June 29th, 16:00 - 17:30**

Session 1, 201: Group Behavior (SHORT)

- Pol Campos, *Helping Behavior and Group Size*
- Valeria Faralla, *Promises in group decision making*
- Katrin Schmelz, *Incentives for conformity and disconformity - a step towards innovation*
Session 2, 202: Communication and Cooperation (SHORT)

- Wolfgang Luhan, *Lying for Others: The impact of agency on misreporting in an economic laboratory experiment*
- Lisa Bruttel, *Getting a Yes. An Experiment on the Power of Asking*
- Florian Stolley, *Framing in a Dictator Game - Gender Differences in the Response to Decision Power and Responsibility*
- Jan Schmitz, *Communication and Hidden Action*
- Tai-Sen He, *The Selfish 'I': The Effects of Pronoun Use on Social Preferences*
- Jordi Brandts, *To listen or not to listen. An experimental study of optional communication*
- Yves Breitmoser, *A Rationale for Unanimity in Committees*
- Brit Grosskopf, *Reputation and Advice: Political Correctness in the Laboratory*
- Riccardo Ghidoni, *Sequentiality increases cooperation in repeated prisoner's dilemmas*

Session 3, 203: Norms and Values (SHORT)

- Jana Friedrichsen, *Experimental Evidence on the Effect of Social Mobility on Cooperation*
- Geoffrey Castillo, *On the ubiquity of social norms*
- Hande Erkut, *Social norms of allocation in the non-monetary domain*
- Christiane Schwieren, *The effect of experience on social norm perception in laboratory experiment participants*
- Daniel Celis, *Development of Social Norms in Children: A Solidarity Game in Colombia*
- Marco Mantovani, *Social responsibility under market and non/market institutions*
- David Dohmen, *On the adverse effects of espionage*
- Antonio Morales, *From foragers to farmers: A lab experiment on the evolution of human values*
- Hannes Titeca, *Do I care what you think of me? Varying observability in a public goods experiment*

Session 4, 220: Public Goods (SHORT)

- Jan Philipp Wilhelm, *Goal setting and team performance*
- Tommaso Reggiani, *Delegation and Obligation in Multiple Public Goods*
- Rainer Michael Rilke, *Can you get too much of a good thing?: The influence of pro-social incentives on labor supply*
- Alexandros Karakostas, *The Team Allocator Game: Allocation Power in Public Goods Games*
- Lawrence Choo, *Investigating the effects of Information asymmetry and Competition in a modified threshold public goods game. An Experiment*
- Wladislaw Mill, *Conditional cooperation and the effect of punishment*
- Arjun Sengupta, *Nominal Choice and Fairness*
- Elisabeth Gsottbauer, *Behavioral spillovers, incentives and collective action: Evidence from experiments*
- SunTak Kim, *Public Goods Bargaining under Mandatory and Discretionary Rules: Experimental Evidence*

Session 5, 125: Macro Experiments

- Lukas Hohl, *Breaking-Up: Experimental insights into international economic (dis)integration*
- Gabriele Camera, *Endogenous Market Formation and Monetary Trade: an Experiment*
- Anita Kopanyi-Peuker, *Are sunspots effective in a big crowd?: Evidence from a large-scale bank run experiment*
Session 6, 22: Bounded Rationality 1: Testing Theories

- Sebastian Schweighofer-Kodritsch, Testing Obvious Strategy Proofness: The Case of Auctions
- Aidas Masiliunas, Learning in contests with payoff risk and foregone payoff information
- Erkut Ozbay, Unavailable Options and Irrelevant Attributes

Session 7, 23: Risk 2

- Christina Strobel, Risk-Taking under Accountability for Oneself and Others: A Laboratory Experiment
- Andre Hofmeyr, The Risk-Trust Confound: New Evidence from a Developing Country
- Yunfeng Lu, The Rice Theory of Risk Attitudes
- Anna Merkel, Active versus Passive Risk Taking: An Experimental Analysis

Session 8, 21A: Financial Markets 1

- Antonia Grohmann, Earning more tomorrow: Overconfident income expectations and consumer indebtedness
- Matthias Wibral, Skewness expectations and portfolio choice
- Dipyaman Sanyal, Effect of Tobin Tax in an Experimental Financial Market
- Tomas Miklanek, The more you trade, the less you earn? An experimental study

Session 9, 21B: Decision Theory in the Field

- Matej Lorko, Historical information and project duration estimates
- Chris Wilson, Being in the Right Place: A Natural Field Experiment on the Causes of Position Effects in Individual Choice
- Esther Schuch, Cognitive Biases and Expert Judgement in Natural Resource Management
- Chalmers Mulwa, Ambiguity Aversion and Demand for Weather Information in Agricultural Technology Adoption: Case of Namibia

Session 10, 112: Repeated Games

- Juan Carrillo, Altruism and strategic giving in children and adolescents
- Jeongbin Kim, The Effects of Time Preferences on Cooperation: Experimental Evidence from Infinitely Repeated Games
- Yaroslav Rosokha, Learning with Mixed Strategies in Repeated Games
- Teresa Backhaus, God may play dice, but do we?

Session 11, BG 08: Lying 1: norms and image

- Zvonimir Basic, The Influence of Self and Social Image Concerns on Lying
- Suparee Boonmanunt, Scarcity and Cheating: Evidence from Changes in Food Stock
- Matthias Praxmarer, Social Comparison and (Dis)Honest Behavior
- Johanna Jauernig, Willful Ignorance and the Ethics of Algorithms

Session 12, BG 13: Discrimination 1

- David Masclet, Discrimination as favoritism: The private benefits and social costs of in-group favoritism in an experimental labor market
- Chi Trieu, Who should (not) benefit from affirmative action? Ability, effort, and luck as justifications for quota rules
- Doris Weichselbaumer, The effect of photos and name change on discrimination against migrants in Austria
Session 13, BG 108: Beliefs and Information

- Edwin Ip, How Do Gender Quotas Affect Hierarchical Relationships? Complementary Evidence from a Representative Survey and Labor Market Experiments
- Florian Spitzer, Product Testing in Markets for Experience Goods
- Michael Seebauer, Reputation formation with competitive investors
- Kai Barron, Everyday econometricians: Selection neglect and overoptimism when learning from others

Session 14, BG 113: Charitable Giving 1

- Arthur Schneider, Religious Bias in Charitable Giving
- Pooja Balasubramanian, Religious discrimination and altruistic preferences in children: Evidence from a field experiment in India
- Ozgur Gurerk, Virtual Reality and Charitable Giving - An Experimental Study
- Antonio Alonso Arechar, From foe to friend and back again: The temporal dynamics of intra-party bias in the 2016 U.S. Presidential Election

June 30th, 09:30 - 11:00

Session 1, 201: Markets 2

- Daniel Friedman, An Experimental Investigation of Price Dispersion and Cycles
- Volker Benndorf, An Experiment on Partial Cross-Ownership in Oligopolistic Markets
- Katharina Momsen, Recommendations in Credence Goods Markets with Horizontal Product Differentiation
- Michel Tolksdorf, Behavior-based price discrimination and retention offers: An experimental analysis

Session 2, 202: Field Experiments 2

- Anna Kerkhof, Incumbency Dominance in Letters to the Editor: Field Experimental Evidence
- Daniel Salicath, Improving Educational Outcomes Through Goal Setting, Incentives, and Self-Help Groups: Experimental Evidence from Medellin, Colombia
- Marco Castillo, The long lasting effects of political violence on risk preferences
- Maria Mavlikeeva, Discrimination Against Entrepreneurs and Ethnic Minorities in the labour market: Field Experiment in Russia

Session 3, 203: Trust and communication

- Joo Young Jeon, The art of asking: Pre-play communications in dictator games
- Elisabetta Leni, Guilt Aversion and Trust: An Analysis of Heterogeneous Factors
- Jason Shachat, He who sets the price, determines the quality: trust in supply chain relationships
- Francois Cochard, Intermediation and discrimination in an investment game: an experimental study

Session 4, 220: Beliefs 1: Biases

- Jana Willrodt, Is there a `true' consensus effect?
- Isabel Busom, Changing economic misconceptions: A field experiment
- Irenaeus Wolff, Biases in Beliefs: Experimental Evidence
- Sevgi Yuksel, Biases Over Biased Information Structures: Confirmation and Contradiction Seeking Behavior in the Laboratory
Session 5, 125: Preferences 2: Risk and Time

- Agnieszka Tymula, *Do adolescents' risk and time preferences change when they are observed by peers?*
- Hongming Zhao, *Temporal Stability of Risk Preferences: Maximum Simulated Likelihood Estimation of Cumulative Prospect Theory*
- Rebecca McDonald, *Cross modal discounting for risk and time*
- Bin Miao, *Intertemporal Consumption with Risk: A Revealed Preference Analysis*

Session 6, 22: Coordination

- Ragnar Juelsrud, *Information quality and regime change: Evidence from the lab*
- Sudeep Ghosh, *Inducing Effort in Groups: An Experimental Investigation of Forward Induction and Loss Aversion*
- Theodore Turocy, *Racing towards a finishing line: Theory and experiment*
- Janet Jiang, *Adoption of a New Payment Method: Theory and Experimental Evidence*

Session 7, 23: Other-regarding Preferences 2: Strategic Interaction

- Vittorio Pelligra, *In Search of Homo Relationalis. Empathy and Strategic Behavior in Simple Experimental Games*
- Jan Hausfeld, *Fairness Intentions in Strategic Interaction: An (interactive) eye-tracking study*
- Ryan Rholes, *Coase Theorem in a Digital Environment: A Replication and Extension*
- Stephan Muller, *Betrayal Aversion and the Effectiveness of Incentive Contracts*

Session 8, 21A: Groups and Social Concerns

- Sergio Mittlaender, *The Price of Exclusion, and the Value of Inclusive Policies*
- Michal Durinik, *Post-promotion effort and group identity*
- Ghida Karbala, *Social Comparison at the Workplace: Evidence from a Field Experiment in Kolkata, India*
- Philipp Lergetporer, *Do Minorities Misrepresent their Identity to Avoid Being Discriminated? Experimental Evidence From Georgia*

Session 9, 21B: Bounded Rationality 2: Complexity

- Mauro Papi, *You Dislike Risk? Then Do Not Search by Characteristic: A Lottery-Choice Experiment*
- Sen Geng, *Information hoarding in private learning and social learning settings*
- Alexia Gaudeul, *Is the attraction effect fast or slow? A choice process experiment.*
- Chris Starmer, *Assessing choice overload in a complex environment*

Session 10, 112: Cognition and Emotions

- Jaesun Lee, *How Does Competition Affect People Economically and Emotionally?*
- Linda Kamas, *Does Empathy Pay?*
- Diya Abraham, *The influence of compassion on decisions involving intertemporal choice*
- Christoph Schutt, *Care and ander motives in social dilemmas*

Session 11, BG 08: Lying 2: spillovers

- Jan Kristian Woike, *Can promises reduce cheating in the absence of punishment?*
- Antonio Filippin, *Cheating in one shot vs repeated task*
- Fabio Galeotti, *The spillover effects of monitoring institution on unethical behavior across contexts*
- Thijs Brouwer, *The Effects of Self-Serving Altruistic Dishonesty on Trust*
Session 12, BG 13: Social Image and Status

- Jin Di Zheng, High Social Status Induces Prosocial Behaviour
- Yilong Xu, Social Information and Selfishness
- Luigi Butera, The Welfare Effects of Social Recognition: Theory and Evidence from a Field Experiment with the YMCA
- Tobias Regner, Testing three generations of social preferences models

Session 13, BG 108: Methodology 1: Games

- Anne-Christine Barthel, Coordination and Learning in Games with Strategic Substitutes and Complements
- Marco Lambrecht, Measuring skill and chance in games
- Roy Chen, Common knowledge in coordination games: learning from non-replication
- Ahrash Dianat, Implementing Ordinal Games in the Lab

Session 14, BG 113: Norm enforcement

- Patricia Kanngiesser, The development of third party norm enforcement in eight diverse populations
- Philipp Krugel, Cooperation and Norm-enforcement under Impartial vs. Politicized Sanctions
- Benjamin Beranek, Culture of Honor Revisited: Examining Punishment Behavior of US Southerners in Social Dilemmas

Session 15, BG 117: Incentives 1

- Martin Vollmann, Subjective and Objective Skill Evaluation
- Victor Gonzalez Jimenez, Probability Distortions as Incentives
- Veronica Rattini, Discretion in Workload Management: an Experiment on Attention Allocation and Performance

June 30th, 11:30 - 13:00

Session 1, 201: Contests (SHORT)

- Thomas Giebe, Does a short-term increase in incentives boost performance?
- Vera Angelova, Tournaments with fatigue and recovery: The effect of a one-time increase in incentives
- Jeffrey Carpenter, Not wilting under pressure: using counter-biasing to prevent big mistakes at high stakes
- Ernesto Reuben, Policy capture by special interests in democracies: The role of revolving doors and post-office employment
- Alexander Usvitskiy, State-contingent Risk-taking in Dynamic Contests
- Francesco Fallucchi, On the lack of learning in winner-take-all industries - An experiment
- Regine Oexl, Team Contests, Sabotage and Helping
- Rosemarie Nagel, Reformulating archetypal economic games with a generalisation of the Keynesian Beauty Contest game
- Enrique Fatas, Not all Group Members are created Equal

Session 2, 202: Social Behavior (SHORT)

- Fuhai Hong, Multidimensional Group Identity: An Experimental Study
- Eli Spiegelman, A bird in the hand: ambiguity and optimism in a strategic environment.
- Roberto Weber, Is Social Responsibility a Normal Good?
- Tigran Aydinyan, Group Identity in Gains and Losses
- Maj-Britt Sterba, The scope of justice: Attitudes on morally relevant group characteristics.
- Peter Moffatt, Inequality-Aversion and Risk Attitude in Simple Games
Session 3, 203: Decisions under Uncertainty (SHORT)

- Krishna Savani, The Cancellation Heuristic in Intertemporal Choice
- Marius Sossou, Time Preferences and Financial Decisions among the Elderly
- Jantsje Mol, Moral hazard and financial incentives for risk reduction in natural disaster insurance
- Sabine Kroeger, Pre-election surveys and heuristics - A field experiment
- Mehmet Yigit Gurdal, Demand for Decision Autonomy and Willingness to Take Responsibility in Risky Environments: Experimental Evidence
- Alessandra Luzzi, A behavioral theory of startup growth: do high opportunity cost individuals try to scale up faster?
- Amalia Di Girolamo, Gender, Cognitive Ability, and Risk Preferences at an Early Age
- Irene Mussio, How much risk is too much risk? Accounting for background risks in the analysis of higher-order risk preferences

Session 4, 220: Market Behavior (SHORT)

- Ro'i Zultan, Manipulation in prediction markets
- Sander Onderstal, An Experimental Comparison of Crowdfunding Mechanisms
- Cary Deck, Near-Continuous Time Auctions
- Heike Hennig-Schmidt, Sanctions and Imitation of Virtuous Behavior Increase International Cooperation
- Rustamjan Hakimov, Avoiding Black Markets for Appointments at Public Offices
- Marion Ott, Declining Prices Across Second-Price Procurement Auctions
- Radosveta Ivanova-Stenzel, How do sellers benefit from Buy-It-Now prices in eBay auctions? - An experimental investigation
- Henrik Orzen, Selection in markets : An experimental approach
- Sotiris Georganas, Driving to the Beat: reputation vs selection in the taxi market

Session 5, 125: Ambiguity

- M. Kathleen Ngangoue, Trading under ambiguity and the effect of learning
- Emel Filiz Ozbay, Size Matters under Ambiguity
- Anisa Shyti, Ambiguity Attitudes and the Relevance of Entrepreneurial Intention: An Experiment
- Svetlana Pevnitskaya, Information Aggregation in Social Networks

Session 6, 22: Gender 1: Competitiveness

- Nikos Nikiforakis, Motherhood and the willingness to compete
- Siri Isaksson, It Takes Two: Gender differences in in group work.'
- Sandra Bedenk, Does it matter who is judging? Gender and Preferences for Competition
- Noah Bacine, Gender, Culture, and Competition

Session 7, 23: Other-regarding Preferences 3

- Francesco Bogliacino, Socioeconomic stratification and stereotyping: Lab-in-the-field evidence from Colombia
- Hyunkyong Lee, The Effect of Feedback Content and Timing on Self-other Gap in Risk-taking
- Mariana Blanco, To segregate, or to discriminate - that is the question: experiments on the effect of social identity on prosocial behavior
- Wiebke Szymczak, The transmission of prosocial preferences in principal-agent experiments with incomplete contracts
Session 8, 21A: Beliefs 2: Information Processing

- Raul Lopez-Perez, No chance: Over-inference with limited attention
- Zahra Murad, Performance Beliefs and Allocation of Teamwork: An Experiment
- Raman Kachurka, Cognitive biases fuel popularity of lottery strategies
- Matthias Mayer, Information Processing & Sea Level Rise

Session 9, 21B: Methodology 2: Techniques and Tools

- Ewa Zawojska, Is there really a difference between 'contingent valuation' and 'choice experiments'?
- Gari Walkowitz, On the Validity of (Cost-Saving) Randomization Methods in Dictator-Game Experiments: A Systematic Test
- Dirk Betz, How to make your data findable, long time accessible and citable on your terms?
- Martin Angerer, Income uncertainty and retirement savings in different pension systems: An experimental study

Session 10, 112: Auctions

- Stefano Galavotti, An Experimental Study on Sequential Auctions with Privately Known Capacities
- Katarzyna Zagorska, Revealing consumers' preferences with a modified Groves Clarke tax mechanism
- Alexander Heczko, Competing Sellers and Reserve Prices
- Gyula Seres, The Effect of Collusion on Efficiency in Experimental Auctions

Session 11, BG 08: Dishonesty and Corruption

- Ivan Soraperra, A market for honesty. An experiment on corruption in the education sector
- Milos Fisar, Do you take it? Trade-off between wage and bribe
- Jiri Spalek, Embezzlement and Corruption
- Johannes Abeler, www.preferencesfortruthtelling.com

Session 12, BG 13: Public Goods, Groups, Morals

- Simone Quercia, Framing Effects and the Elicitation of Preferences in Social Dilemmas: the Role of (Mis)Perceptions
- Lea Heursen, Does Relative Performance Information Lower Group Morale?
- Jan Gogoll, Leviathan for Sale: Social Contracts for Growing Societies
- Mikhail Ananyev, Leading-by-Example in a Public Goods Game with Heterogeneous Returns

Session 13, BG 108: Global Games and Coordination

- Frank Heinemann, An Experimental Test of the Global-Game Selection in Games with Asymmetric Players
- Tony So, Pay cuts and layoffs in an experimental minimum effort coordination game
- Myrna Hennequin, Managing coordination on bubbles in experimental asset markets with monetary policy
- Ekaterina Shakina, Bank runs as a coordination problem within a two banks set-up: an experimental study

Session 14, BG 113: Markets 3

- Mario Scharfbillig, The effect of ownership structure in markets with externality
- Dustin Tracy, Simulating Health Insurance Regimes' Adoption and Impacts across Lifetime in a Laboratory Experiment
- Ayse Tugba Atasoy, Strategic Demand Response to Dynamic Pricing: A Lab Experiment for the Electricity Market
- Katerina Sherstyuk, An Experimental Test of the Commodity Pricing Model with Storage
Session 15, BG 117: Effects of Feedback on Performance

- Valentin Wagner, Effects of Timing and Reference Frame of Feedback: Evidence from a Field Experiment in Secondary Schools
- Raphael Brade, Relative Feedback and Academic Performance -- A Field Experiment in Higher Education
- Henning Mueller, Effects of Performance Transparency in a Mathematics E-Learning Application: Evidence from a Randomized Controlled Trial
- Andrea Isoni, Relative performance feedback, effort and free riding in creative and repetitive team tasks

June 30th, 16:15 - 17:45

Session 1, 201: Teams

- Simin He, Dominated Contracts in Team Production
- Muruvvet Buyukboyaci, Team Formation with Complementary Skills
- Emike Nasamu, Leadership and Coordination in Complex Team Games.
- Thomas Palfrey, Games Played by Teams of Players

Session 2, 202: Framing and Advertising

- Felix Schmidt, Don't Tell Me What I Already (Don't) Know. Avoidance of Information on Unhealthy Food.
- Dietmar Fehr, Scarcity and Exchange Asymmetries: Evidence from Small-Scale Farmers in Rural Zambia
- Marco Kleine, Creativity and Framed Incentives
- David Reiley, Measuring the Effects of Audio Advertising: Results from a Field Experiment on Pandora

Session 3, 203: Public Goods 2

- Martina Cecchini, The Resilience of Cooperative Behaviour and Social Norms: Combining Real-World and Experimental Evidence
- Britta Butz, The effect of disclosing identities in a socially incentivized public good game
- Christian Thoeni, Conditional Cooperation: Review and Refinement

Session 4, 220: Field Experiments 3

- Ivo Steimanis, The shadow of the future: How do rising sea levels affect pro-social and risk preferences? Experimental evidence from Solomon Islands
- Ben Greiner, On the Role of Commitment and Two-Part Tariffs in Credence Good Markets - An Experimental Study in Behavioral Mechanism Design
- Christian Hoenow, Introducing and Terminating External Incentives: A Field Experimental Study of Forest Conservation as a Common-Pool Resource Dilemma
- Andreas Nicklisch, Punishment Patterns, Trust, and Traumatization among Syrian Civil War Victims in Syria: A Field Experiment

Session 5, 125: Bargaining 1: Gender

- Inigo Hernandez-Arenaz, Gender Differences in Alternating-Offer Bargaining: An Experimental Study
- Anastasia Danilov, Affirmative Action Policies and Behaviour in Promotional Tournaments: An Experiment
- Laura Razzolini, Best-of-five Contest: An Experiment on Gender Differences
- Hannes Rau, Gender Differences in Negotiations - Experimental Evidence

Session 6, 22: Health and Performance

- Luca Corazzini, The Good Outcomes of Bad News. A Randomized Field Experiment on Formatting Breast
Cancer Screening Invitations
- Jonas Radbruch, The impact of self-selection on performance
- Manuel Hoffmann, Why do people not vaccinate?
- Katja Fels, Is prompting participants to plan successful? Field evidence from MOOCs

Session 7, 23: Beliefs 3: Self-Confidence
- Boon Han Koh, Attribution biases in leadership: Is it effort or luck?
- Michal Krawczyk, Task difficulty and overconfidence. Evidence from distance running.
- Vojtech Zika, Does Competition Trigger and Boost Overconfidence?
- David N Danz, The Biases of Others: Anticipating Informational Projection in an Agency Setting

Session 8, 21A: Discrimination 2
- Joe Vecchi, Discrimination at the Extensive and Intensive Margin
- Nikolai Cook, Working for Yourself
- Vegard Sjurseike Wiborg, Coauthor Penalty - Evidence from the lab
- Emmanuel Peterle, Gender bias in job referrals: An experimental test

Session 9, 21B: Other-regarding Preferences 4: Determinants
- Yefeng Chen, Does Collectivistic and Individualistic Institution Make People Different? Field Experimental Evidence from Chinese Villages
- Till Weber, A Cross-Societal Comparison of Cooperative Dispositions and Norm Enforcement
- Lena Detlefsen, Are Economic Preferences Shaped by the Family Context? The impact of birth order and siblings' sex composition on economic preferences

Session 10, 112: Responsibility
- Masaru Sasaki, Committee Voting and Moral: Laboratory Experiments
- Caterina Giannetti, Risk-taking for others: an experiment on ethics meetings
- Anja Bodenschatz, Dispensing Responsibility? - Avoidance of Ethical Dilemmas by Decision Randomization
- Matthias Uhl, Guarantor Selection for the Offences of Artificially Intelligent Persons

Session 11, BG 08: Conflicts
- Gerald Eisenkopf, Partisan Influence in Conflicts
- Henrik Zaunbrecher, Conflict and Migration: Mobility in Group Contests
- Dan Kovenock, Experiments on Generalized Colonel Blotto Games
- Jordan Adamson, The Supply Side Determinants of Territory and Conflict

Session 12, BG 13: Communication and Information
- Nobuyuki Hanaki, Digital communication and trust
- Vanessa Valero, Public Discourse and Pro-Social Market Behavior
- Marianne Stephanides, Communication and helping behavior: An experimental study
- Alexander Nesterov, Moral wiggle room reverted: Information avoidance is myopic

Session 13, BG 108: Methodology 3: External Validity
- Hong Il Yoo, Dynamic Consistency, Sample Selection and Attrition: A Panel Experiment on Individual Discount Rates
- Lisa Spantig, The Endowment Effect and Savings Decisions of the Poor
Session 14, BG 113: Risk 3

- Paul Feldman, Convex Preferences Over Lotteries
- Oben Bayrak, Decisions under Risk: Dispersion and Skewness
- Taisuke Imai, Robust Revealed Preference Characterization of Expected Utility
- Timo Heinrich, Exploring the consistency of higher-order risk preferences

Session 15, BG 117: Incentives 2

- Elif Incekara Hafalir, Incentive to Persevere
- Andrej Woerner, Exercising More with a Matched Bet
- Thomas Lauer, You get what you pay for - The effect of incentives on quality and quantity in an experimental real-effort task
- Maoliang Ye, Team Incentives, Productivity and Choices: A Real-time Real Effort Experiment

July 1st, 09:00 - 10:30

Session 1, 201: Gender 2: Leadership

- Lata Gangadharan, Competing by Default: A New Way to Break the Glass Ceiling
- Ananish Chaudhuri, *Un)willing to lead? An experimental study on gender and leadership
- Danila Serra, The Gender Leadership Gap: An Experiment
- Anna Sandberg, Effects of team gender composition on leadership aspirations

Session 2, 202: Markets 4

- Joerg Oechssler, Copy Trading
- Ryan Oprea, Aggregation and Convergence in Experimental General Equilibrium Economies Constructed from Naturally Occurring Preferences
- Markus Vomhof, How are Altruistic Preferences Aggregated in Competitive Markets? A Laboratory Experiment
- Lucas Rentschler, All-pay auctions without a level playing field

Session 3, 203: Violence, negative Reciprocity and Competitive Preferences

- Abu Siddique, Competitive Preferences and Ethnicity: Experimental Evidence from Bangladesh
- Stefania Bortolotti, Blind Rage: Inequality, Intentions, and Indiscriminate Punishment
- Daniel Zizzo, Does exposure to violence affect reciprocity? Experimental evidence from the West Bank
- Natalia Starzykowska, An eye for an eye, a study of negative reciprocity. Evidence from a game show.

Session 4, 220: Charitable Giving 2: Recipient Characteristics

- philip grossman, Good News, Bad News and Giving: Impact of Recipient Characteristics
- Johannes Lohse, Social Distance and inter-charity competition
- Arne Robert Weiss, Need, equity and equality - testing the principledness of laypeople
- Julian Harke, Quality certifications for nonprofits, charitable giving, and donor's trust: experimental evidence

Session 5, 125: Lying 3

- Philipp Gerlach, The Truth about Lies. A Meta-Analysis on Dishonest Behavior
- Subhasish Modak Chowdhury, Pre-planning and its Effects on Repeated Dishonest Behavior: An Experiment
Session 6, 22: Bounded Rationality 3

- Agne Kajackaite, *Lying about luck versus lying about performance*
- Florian Kerzenmacher, *Lying to a liar: The effect of within-group reputation on moral behavior*
- Itay Sisso, *Psychological Opportunity Cost*
- Ofer Azar, *Does relative thinking exist in mixed compensation schemes?*
- Luba Petersen, *Improving Dynamic Optimization in Life-Cycle Consumption Experiments*
- Eva Berger, *Unburden Renters by Making Landlords Pay the Commission? Evaluating a Policy Reform in Germany*

Session 7, 23: Fairness in Markets

- Roberto Weber, *Immoral labor markets*
- Benedikt Meyer-Bretschneider, *Fairness in markets: The role of transaction costs, quality, and donations*
- Essi Kujansuu, *An experiment on wage rigidity and fairness: Can real wage cuts bring flexibility to the labour market?*
- Lars Freund, *Reciprocity in Bilateral Trade?*

Session 8, 21A: Preferences 3

- Joanna Rachubik, *Verifying the representativeness heuristic: a field experiment with real lottery tickets*
- Elias Bouacida, *Choice Correspondence and the Completeness Axiom: a Methodology and an Experiment*
- Hjoerdis Hardardottir, *The effect of cognitive load on time perception and time preferences*

Session 9, 21B: Financial Markets 2

- Johan de Jong, *The Effect of Futures Markets on the Price Dynamics in Commodity Markets*
- Christoph Merkle, *Algorithm Aversion in Financial Investing*
- Kristian Lopez Vargas, *Experiments in High-Frequency Trading: the Continuous Double Auction versus the Frequent Batch Auction*
- Wael Bousselmi, *An Experiment on Market Reaction to Fundamental Value Shocks*

Session 10, BG 08: Promises, Reciprocity, and Corruption

- Manuel Munoz, *Reciprocity in the workplace: Communication and contracts in a multitasking setup*
- Leonardo Becchetti, *We Can Be Heroes Trust and Resilience in Corrupted Economic Environments*
- Chiara Nardi, *The power of words in a petty corruption experiment*
- Filippo Pavesi, *Watch your Words: an Experimental Study on Communication and the Opportunity Cost of Delegation*

Session 11, BG 13: Other-regarding Preferences 5: Equality

- Wenkai Sun, *The Power of Relative Proportion - An Experiment of Income Allocation*
- Arthur Dolgopolov, *Revealed Social Preferences*
- Hugh Sibly, *Identifying Referents: An experimental study*
- Franziska Then, *How do physicians prioritize? A lab experiment with heterogeneous patients*

Session 12, BG 108: Tax Compliance and Nudging

- Jana Cahlikova, *Employing Behavioral Economics: Improving the Efficiency of TV License Fees Collection*
Session 13, BG 113: Public Goods 3

- Yun Wang, Rebate Policies in Large Group Threshold Public Goods Experiment: Belief, Information, and Repetition
- Axel Sonntag, Information defaults in repeated public good provision
- Riccardo Ghidoni, Carbon is Forever: A Climate Change Experiment on Cooperation
- Mike Farjam, Nonetheless or all the more? Investing into climate change mitigation policies despite a risk of failure

Session 14, BG 117: Voting Behavior and Bargaining

- Jose Alberto Guerra, Ethical voting: Theory and Experiment
- Peter Matthews, Responsible Majorities? Partisan Composition and Expressive Voting
- Jean-Christian Tisserand, Does the obligation to bargain make you stick on your guns? An experimental analysis
- Anita Zednik, NOTAble differences in voting behaviour

July 1st, 11:00 - 12:30

Session 1, 201: Gender 3

- Tim Cason, Gender, Beliefs and Coordination with Externalities
- Michalis Drouvelis, Gender differences in social comparisons
- Gahye Jeon, Gender Differences in Competitiveness, the Spousal Income Gap, and Children
- Mackenzie Alston, The (Perceived) Cost of Being Female: An Experimental Investigation of Strategic Responses to Discrimination

Session 2, 202: Behavior of Children

- Lenka Fiala, Academic Debate: Improving Student Performance one Speech at a Time
- Isabelle Brocas, Heuristic to Bayesian: the Evolution of Reasoning from Childhood to Adulthood
- Daniel Schunk, Self-regulation training in primary schools. Evidence from a randomized controlled experiment
- Claudia Zoller, Grit in kindergarten children

Session 3, 203: Networks

- Mofei Jia, Social competition in networks: an experimental study
- Natalia Borzino, Networks, Spillovers and Compliance
- Min Zhu, Partnership Formation in Social Network: An Experimental Investigation

Session 4, 220: Development

- Bjoern Vollan, The Impact of Natural Disasters on Social Preferences: A case study from typhoon Yolanda in Panay, Philippines
- Andreas Grunewald, Cognitive Foundations of Passive Choices
- Ondrej Krcal, The Effect of Housing Conditions on Preferences and Cognitive Function

Session 5, 125: Bargaining 2: Obstacles
Jona Linde, *Anchoring in Bargaining*
Lian XUE, *What's ours is ours: An experiment on the efficiency of bargaining over the fruits of joint activity*
Emin Karagozoglu, *Bargaining When There are Complementarities in Production*
Christoph Vanberg, *Legislative bargaining with costly communication*

**Session 6, 22: Risk 4**

- Adrian Bruhin, *Risk and Rationality: Testing Salience Theory of Choice under Risk*
- Kirby Nielsen, *Testing the Axiomatic Foundations of Risky Intertemporal Choice*
- Holger A. Rau, *The Disposition Effect when Deciding on Behalf of Others*
- Leonidas Spiliopoulos, *Learning and deciding from experience*

**Session 7, 23: Beliefs 4**

- Todd Swarthout, *Belief distributions, confidence and Bayes rule*
- Thibaud Pierrot, *Experimental evidence on eliciting point predictions using objectively known distributions*
- Stephan Jagau, *Expectation-Based Psychological Games and Psychological Expected Utility*
- Piotr Evdokimov, *Higher-order Learning*

**Session 8, 21A: Norms 2**

- Jana Vyrastekova, *Supernatural sanctioning and prosocial behaviour: experimental evidence*
- Nina Serdarevic, *License to Lie: Elicitation of social norms governing lying*
- Martine Visser, *Green Nudges in the DSM toolkit: Evidence from Drought-Stricken Cape Town*
- Sebastian Kruegel, *Whistleblowing institutions: when toothless tigers become dangerous*

**Session 9, 21B: Evaluation of Social Programs**

- Anett John, *You Get What You Pay For: Evidence from a Jobseeker Conditional Cash Transfer Program in France*
- Steffen Altmann, *Complexity and the Effectiveness of Public Policy*
- Francisco Flores, *Showing Life Opportunity: Increasing opportunity-driven entrepreneurship and STEM careers through online courses in schools.*
- Nora Grote, *How to motivate refugees: Leveraging identity-framed communication to increase language learning*

**Session 10, BG 08: Borrowing and Saving**

- Kjetil Bjorvatn, *Are wives more cooperative than husbands? Experimental evidence from Ethiopia*
- Phumsith Mahasuweerachai, *Benefiting from Our Biases: Modifying the Save-More-Tomorrow(TM) Principles to Increase Savings among Thai Military Officers*
- Andreas Orland, *Why labor supply is a substitute for saving and whether this explains precautionary behavior*
- Melanie Koch, *Be Positive and See Yourself Burdened with Debt? On the Effect of Biased Expectations on Over-Borrowing*

**Session 11, BG 13: Lying 4: lying and taxes**

- Johan Birkelund, *Dis(advantage, fraud and other-regarding behavior*
- Sarah Necker, *The supply of undeclared work - Evidence from a natural field experiment*
- Caroline Stein, *The effect of whistleblowing policies on internal reporting and lying behavior*
- Martin Fochmann, *Less Cheating? The Effects of Prefilled Tax Returns on Compliance Behavior of Taxpayers*

**Session 12, BG 108: Other-regarding Preferences 6: Risky Contexts**

- Fabian Paetzelt, *A little uncertainty diminishes social preferences*
**Session 13, BG 113: Public Choice: Theory and Experiments**

- Maria Polipciuc, *Betrayal Aversion and Identity in the Longer Run*
- Andis Sofianos, *Self-reported & Revealed Trust: Experimental Evidence*
- Yan Xu, *Measuring tastes for equity and aggregate wealth behind the veil of ignorance*

**Session 14, BG 117: Public Goods 4**

- Liza Charroin, *The performance of q-majority rules with logrolling: theoretical and experimental evidence*
- Boris Ginzburg, *When Collective Ignorance Is Bliss: Theory and Experiment on Voting for Learning*
- Raisa Sherif, *Sanctioning, Selection and Pivotality - Theory and Experimental Results*

- Xianghong Wang, *Does Relative Framing of Contribution and Minimum Level Increase Public Good Contributions?*
- Rawadee Jarungrattanapong, *Can ostracism turns free-rider to be more cooperative? Evidence from an experiment in Thailand*
- Christian Koch, *Covenants before the swords: Normative conflict and cooperation in heterogeneous groups*
- Pietro Guarnieri, *Individual incentive or public support: an experiment on contribution to collective goals*
Trading under ambiguity and the effect of learning

M. Kathleen Ngangoue
New York

ABSTRACT:
In this experimental study, I investigate the effect of ambiguity on investors' willingness to trade under different information conditions. The results confirm the prediction of a wide set of theoretical models, that ambiguity aversion reduces willingness to trade in incomplete markets. Participants choose significantly wider bid-ask spreads when return distributions are ambiguous rather than objectively known. This effect also persists when subjects learn probabilities progressively. However, in the latter case, different information generates more divergent quotes. The more extreme quotes are consistent with a particular updating rule, which is conditional smooth preferences. These findings highlight the role of gradual information release for market under- and overreaction in ambiguous markets.

Author(s): M. Kathleen Ngangoue
Topic: Decision Theory: Ambiguity, Decision Theory: Beliefs
Link: [https://docs.wixstatic.com/ugd/8b088f_2f8b1cbae0b74fc9a1db88afdd19574.pdf](https://docs.wixstatic.com/ugd/8b088f_2f8b1cbae0b74fc9a1db88afdd19574.pdf)
Back to session: Ambiguity

Size Matters under Ambiguity

Emel Filiz Ozbay
University of Maryland

ABSTRACT:
We repeat Ellsberg's two-urn experiment by varying the number of beads in the urn. By providing symmetric information on urns with different number of beads and keeping the most optimistic and pessimistic possibilities the same, we elicit subjects' preferences for the size of Ellsberg's urn. Subjects prefer the bets from the ambiguous urns with more beads. Ambiguity averse subjects mainly drive this effect. We find that the ambiguity attitude in an Ellsberg's two-urn experiment is not robust, and ambiguity aversion diminishes by the size of the urn. Finally, we study the restrictions that our findings impose on the existing ambiguity models.

Author(s): Emel Filiz-Ozbay, Huseyin Gulen, Yusufcan Masatlioglu, Erkut Ozbay
Topic: Decision Theory: Ambiguity, N/A
Back to session: Ambiguity

Ambiguity Attitudes and the Relevance of Entrepreneurial Intention: An Experiment

Anisa Shyti
IE Business School

ABSTRACT:
Ambiguity is ubiquitous in entrepreneurial decisions. However, recent studies show no difference in ambiguity attitudes of entrepreneurs and non-entrepreneurs, in stark contrast with classic and contemporary entrepreneurship theory. Through a within-subject experimental design, I measure individual ambiguity attitudes in two conditions that are quantitatively equivalent, but differ in terms of framing. In the chance condition, participants are told that environmental
Contingencies matter for the likelihood of success, and in the skill condition participants are told that skill matters in influencing the likelihood of success. Participants' entrepreneurial intention and overconfidence were collected prior to the experimental task. The findings show that, first, ambiguity attitudes are likelihood- and context-dependent. Second, in the chance condition participants predominantly exhibit ambiguity aversion. In the skill condition, findings show a prevalence of ambiguity seeking. Overconfidence, orthogonal to entrepreneurial intentions, is irrelevant to the observed differences in ambiguity attitudes between chance and skill conditions. Finally, entrepreneurial intention is relevant to the skill condition only, where it reinforces the tendency to seek ambiguity. The focus on ambiguity attitudes in skill-related contexts and the relevance of entrepreneurial intention is novel, and it contributes to the microfoundations of entrepreneurship theory.

**Author(s):** Anisa Shyti  
**Topic:** Decision Theory: Ambiguity, Decision Theory: Beliefs

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**Information Aggregation in Social Networks**

Svetlana Pevnitskaya  
Florida State University

**ABSTRACT:**

We extend the analysis of previous observational learning experiments by examining the effect of network structure on the transmission and aggregation of information. In line with previous experimental studies on information aggregation, we design an experiment where subjects receive private information, observe prior actions, and make a prediction about the state of the world. However, we extend prior research by allowing different network structures. Social, economic, and organizational networks are complex, and therefore understanding how various network structures affect information aggregation is important in many settings. Additionally, we examine the impact of endogenous and exogenous assignment within the network on individual decisions and social information aggregation.

**Author(s):** Chris Brown and Svetlana Pevnitskaya  
**Topic:** Games: Networks, Games: Information

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**An Experimental Study on Sequential Auctions with Privately Known Capacities**

Stefano Galavotti  
Department of Economics and Management, University of Padua

**ABSTRACT:**

We experimentally study bidding behavior in sequential first-price procurement auctions where bidders' capacity constraints are private information. Treatments differ in the ex-ante probability distribution of sellers' capacities and in the (exogenous) probability that the second auction is actually implemented. Our results show that: (i) bidding behavior in the second auction conforms with sequential rationality; (ii) while first auction's bids negatively depend on capacity, bidders seem unable to recognize this link when, at the end of the first auction, they state their beliefs on the opponent's capacity. To rationalize this inconsistency between bids and beliefs, we conjecture that bidding in the first auction is also affected by a hidden, behavioral type - related to the strategic sophistication of bidders - that obfuscates the link between capacity and bids. Building on this intuition, we show that a simple level-k model may help explain the inconsistency.

**Author(s):** Luca Corazzini, Stefano Galavotti, Paola Valbonesi  
**Topic:** Markets: Auctions, N/A

**Link:** [https://econpapers.repec.org/paper/venwpaper/2017_3a30.htm](https://econpapers.repec.org/paper/venwpaper/2017_3a30.htm)

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Revealing consumers' preferences with a modified Groves Clarke tax mechanism

Katarzyna Zagorska
University of Warsaw, Faculty of Economic Sciences

ABSTRACT:

The Groves-Clarke tax (GCT) scheme is a well-known incentive compatible preference revelation mechanism and an attractive theoretical concept, but a number of assumptions discourage practitioners from its implementation. Our goal was to modify the GCT scheme, so that it could be used in practice. For the modification, instead of collecting the tax, we propose a subsidy in the form of a voucher, whose value can be reduced. The modified scheme is applied in a survey-based study on clients of the largest eBook retailer in Poland. They are asked to state the amount they are willing to pay for each of the six best-selling eBook titles. We chose the eBook with the highest, and positive, sum of the net value (i.e. the difference between individual willingness to pay and eBook price calculated for all of the participants) and offered it to randomly selected respondents. They also receive the voucher, whose value was reduced by the selected e-books' costs and could be further reduced for a pivotal person (the individual who changes the decision of the others). The distribution of values declared by respondents suggests that the threat of being a pivotal person discouraged respondents from providing strategically high or low amounts. Respondents' willingness to pay was also significantly correlated with individual ranking of how likely it is that they would enjoy reading the selected eBooks. Our study suggests that the modified GCT could be applied in several areas to investigate consumers' preferences and to find the optimal decision. In addition, we compare GCT results with results of random n-th price and Vickrey's second price auctions, in which respondents choose one single eBook and then provide the price they are willing to pay for it. Here, we observe preference reversal: the ranking of the mean willingness to pay is different when individuals value all titles from a set of alternatives from when they state the value of one selected title. This result adds insights to the debate on the occurrence of the preference reversal phenomena.

Author(s): Anna Kukla-Gryz, Katarzyna Zagorska
Topic: Markets: Auctions, Decision Theory: Preferences

Competing Sellers and Reserve Prices

Alexander Heczko
RWTH Aachen University

ABSTRACT:

We experimentally analyze reserve price setting by competing auctioneers. Each seller sells one item in an English auction with reserve price. Bidders have unit demand and may bid in all auctions. We predict theoretically and find experimentally that sellers set significantly lower reserve prices if they face competition than in a benchmark setting without competition.

Author(s): Alexander Heczko, Thomas Kittsteiner and Marion Ott
Topic: Markets: Auctions, N/A

The Effect of Collusion on Efficiency in Experimental Auctions

Gyula Seres
Humboldt University Berlin
ABSTRACT:

This paper examines the effect of collusion on allocative efficiency in a second-price sealed-bid auction, in which bidders' valuations have private and common value components. We present a theoretical model which shows that explicit collusion improves average efficiency. Furthermore, a reduction in common value signal variance increases the efficiency of allocations when a cartel is present. We test for the presence of these patterns in a laboratory experiment. Subjects can choose whether to compete or to form a cartel. Colluding bidders can communicate and make side payments using a knockout auction. Our results show that a large majority of bidders join a cartel, collusion has a negative impact on efficiency, and a reduction in common value signal variance increases efficiency under a cartel, as well as in a competitive setting.

Author(s): Charles N. Noussair, Gyula Seres
Topic: Markets: Auctions, Markets: Industrial Organization

Gender Differences in Alternating-Offer Bargaining: An Experimental Study

Inigo Hernandez-Arenaz
University of the Balearic Islands

ABSTRACT:

A laboratory study is carried out to study gender differences and gender interaction effects in structured alternating-offer bargaining. In a symmetric environment, where the 50:50 split is the expected sharing norm, we find no gender differences. In asymmetric environments, where there is no clear sharing norm, but one bargaining party is expected to get more than the other (due to empowerment, entitlement and informational asymmetries), we find that men are less likely to reach an agreement, and that when they do, they bargain for longer and obtain a larger share of the pie. When gender differences are compared between symmetric and asymmetric bargaining environments, gender is not an effect-modifying factor.

Author(s): Inigo Hernandez-Arenaz; Nagore Iriberri
Topic: Games: Bargaining, Psychology and Biology: Gender and Individual Differences
Link: https://drive.google.com/file/d/1it77S62NMFIkOK6niEcomifFX1vfYjZ/view

Affirmative Action Policies and Behaviour in Promotional Tournaments: An Experiment

Anastasia Danilov
University of Cologne

ABSTRACT:

Both affirmative action and sabotage are very common features in organizational contexts. It is supposed that incorporating an affirmative action to even out the heterogeneity of abilities in competition, especially in tournaments, may result in more egalitarian outcomes as well as higher efforts. However, the overall effectiveness of different affirmative action policies is still in question. Especially, it is still unknown whether various types of affirmative action policies such as head-start and handicap have diverse effects on behavior. Furthermore, the effect of introduction or removals of affirmative action policies, which are very common in the filed, are not investigated well. When one considers that it is possible for agents to exert sabotage efforts towards their competitors, the net effect of an affirmative action policy becomes even more ambiguous. We run a real-effort tournament experiment with affirmative action and possibility of sabotage, and we study the effects of head-start and handicap in a dynamic context.
Best-of-five Contest: An Experiment on Gender Differences

Laura Razzolini
University of Alabama

ABSTRACT:
Gender differences in competitiveness have often been cited as a possible explanation for the observed dearth of women in highly-ranked positions within firms. Prior literature has focused on whether men and women differ in their willingness to compete. We conduct a laboratory study to examine, instead, gender differences while in competition. We analyze effort choices in a best-of-five probabilistic contest. The longer contest and the careful manipulation of the gender composition allow us to identify gender differences in competitiveness in an environment where success requires repeated interaction. We find that women exert significantly greater effort only when competing against other women, but for men the gender of the opponent is of no consequence. Our experimental design controls for loss aversion, risk aversion, utility of winning, as well as elicits a measure of confidence.

Gender Differences in Negotiations - Experimental Evidence

Hannes Rau
Universitaet Heidelberg

ABSTRACT:
We systematically study gender differences in experimental wage negotiations, which are widely seen as one factor influencing the gender wage gap. According to past results, women achieve worse outcomes than men, but only when being in the weaker position of bargaining power. Although some factors such as asymmetry of power, negotiation domain and information about gender are supposed to play a role, there is no comprehensive study of their relative importance. To this end, we conduct an experiment in which subjects negotiate in groups-of-two how to divide a pie with asymmetric outside options. In one treatment certain demographic information such as gender is mutually revealed to the group members beforehand. In contrast to existing studies we do not find significant gender differences in this abstract setting. Therefore we vary the degree of asymmetry as well as the size of the manipulation to see if this triggers different behavior.

Anchoring in Bargaining

Jona Linde
VU University Amsterdam

ABSTRACT:
A low opening offer is the most basic advice given to bargainers trying to achieve a low price. Such low offers can lead to low prices through different mechanisms. It can signal that you are a tough negotiator, it can commit you to a hard-nosed strategy, or it can anchor your opponent on a low number. In this project we try to distinguish between these effects, focusing on anchoring. Anchoring is one of the most well-established psychological mechanisms: if people consider a low number they will provide lower estimates and valuations in a range of situations. However, anchoring has never been studied in a strategic setting such as bargaining, where, as discussed, many different mechanisms can affect strategies simultaneously. In our experiments we will present proposers in an ultimatum bargaining setting with an anchor value that is either randomly determined, or set by their responder. Comparing the offers made after similar random and strategically set anchors allows us to explore whether anchoring works in a strategic settings. Comparing the strategic anchor treatment with a control treatment without anchors allows us to determine whether respondents manage to use the anchors to get better offers. Additional treatments allow us to differentiate between mechanisms that could explain observed differences between the effects of random and strategic anchors, such as information transmission and commitment by responders. Results from this experiment add to our understanding of the mechanisms behind anchoring, and the effectiveness of different bargaining strategies.

Author(s): Thomas de Haan, Jona Linde
Topic: Games: Bargaining, Decision Theory: Bounded Rationality
Back to session: Bargaining 2: Obstacles

What's ours is ours: An experiment on the efficiency of bargaining over the fruits of joint activity

Lian XUE
University of East Anglia

ABSTRACT:
We use experimental methods to test the effects of joint endowment on coordination success in tacit bargaining games. It has been well established that people use existing focal point to facilitate coordination and the power of such cues declines as payoff becomes increasingly unequal. We conducted an experiment in which two players jointly engaged in an interactive team building activity and together-earned the stakes over which they bargain. In the team building exercise, two players jointly complete a shortest route task in a metaphor of a treasure hunt. After the two treasure hunters complete the journey, they independently decide how to divide their rewards using a tacit bargaining table. We find that when people jointly earn the opportunity of tacit bargaining by putting in efforts together, they are more likely to choose according to relational cues. Furthermore, we find a positive correlation between performance in the common activity and cooperative behavior in tacit bargaining.

Author(s): Lian Xue, Theodore Turocy, Stefania Sitzia
Topic: Games: Bargaining, Games: Coordination
Link: https://sites.google.com/site/lianxueeconomics/research
Back to session: Bargaining 2: Obstacles

Bargaining When There are Complementarities in Production

Emin Karagozoglu
Bilkent University

ABSTRACT:
We experimentally investigate the bargaining process and outcomes in bargaining games where the surplus to be shared is jointly produced and there are complementarities in the production process. In our experiment, bargaining is unstructured and the joint surplus production function is of the Leontief-type (i.e., inputs are perfect complements). Our
Experimental design varies whether both inputs and outputs can be made subject to a binding agreement (IN&OUT) or this only applies to the produced output (OUTONLY). In the control treatment (OUTONLY), which is the industry standard for bargaining experiments with joint production, subjects first non-cooperatively decide on their contributions to the joint surplus production without communicating with each other, and then bargain over the surplus they jointly produced. In the experimental treatment (IN&OUT), subjects negotiate the whole contract, i.e., they discuss ‘who should invest how much?’ and ‘who should get what from the corresponding surplus?’ Our preliminary analysis shows that both bargaining process and outcomes are significantly influenced by whether both inputs and outputs can be contracted on, or only outputs. More precisely, in IN&OUT (i) efficient surplus production is more frequently observed, (ii) bargaining duration is shorter, and (iii) equal division (of the surplus) agreements are more frequently observed than in OUTONLY.

Author(s): Emin Karagozoglu, Maria Montero, Anders Poulsen
Topic: Games: Bargaining, N/A
Link: https://sites.google.com/site/eminkaragozoglu/home/research
Back to session: Bargaining 2: Obstacles

Legislative bargaining with costly communication

Christoph Vanberg
University of Heidelberg

ABSTRACT:

We conduct 3 person bargaining experiments in which subjects divide a dollar using either majority or unanimity rule. In addition to making and voting on formal proposals, subjects can negotiate verbally via a chat interface. Communication is costly in that each second that subjects communicate is associated with an increased probability that the game is terminated without agreement. In the latter case, subjects are paid predetermined disagreement values. We vary the decision rule (majority or unanimity) as well as the constellation of disagreement values (symmetric, asymmetric). We find that unanimity rule is associated with significantly longer negotiation times, leading to an increased incidence of breakdown. Specifically, this difference is observed in situations with asymmetric disagreement values, but no difference is observed in the symmetric situations.

Author(s): Anna Merkel, Christoph Vanberg
Topic: Games: Bargaining, Public Choice: Voting and Rent Seeking
Back to session: Bargaining 2: Obstacles

Food Rewards: Does using food as a reward change food preferences?

Martina Vecchi
European University Institute

ABSTRACT:

Parents often use sweet and calorie dense foods to reward their children or provide these foods as special treats. We hypothesize that such practices may contribute to the formation of unhealthy food preferences. With a field experiment with 214 children in 3 primary schools in Cologne, we provide evidence supporting this hypothesis. This study also shows that having to exert more effort does not increase further the preference for the food reward, contrary to the predictions of the effort justification effect. We argue that these mechanisms also hold promise for health interventions that support the formation of healthy eating habits.

Author(s): Jan Michael Bauer, Michele Belot, Marina Schroder, Martina Vecchi
Topic: Field Experiments: General, N/A
Back to session: Behavior in Financial Markets and Incentives in Health Behavior (SHORT)
Out-of-Pocket vs. Out-of-Profit in Financial Advisory Fees: Evidence from the Lab

Orly Sade
Hebrew University

ABSTRACT:

The implications of the structure of payment to financial advisors on the behavior of individuals and their willingness to pay (WTP) are of interest to economists and regulators around the globe. This paper uses an experimental economics technique to compare two alternative payment methods. The first is a direct, 'out-of-pocket' payment method (payment from a checking account) and the second is an indirect, 'out-of-profit' one (payment from an investment portfolio account). We document that for the same financial advice, the subjects in the 'out-of-pocket' treatment - a payment framed in terms of losses - were willing to pay on average 25 per cent less than the subjects in the 'out-of-profit' treatment - a payment framed in terms of gains. These results hold after controlling for a vector of personal, demographic, and behavioral characteristics, as well as for performance on a math test.

Author(s): Yevgeny Mugerman, Orly Sade and Eyal Winter

Topic: Markets: Finance, Applied Economics: Other

Back to session: Behavior in Financial Markets and Incentives in Health Behavior (SHORT)

Does risk sorting explain bubbles?

Agnes Pinter
Universidad Autonoma de Madrid

ABSTRACT:

Recent studies reveal that sorting based on gender and cognitive abilities may explain the emergence of bubbles in experimental asset markets. Since risk aversion is often correlated both with gender and cognitive skills, it seems a natural candidate to unify these studies. We sort participants in our experiment according to their degree of risk aversion into markets and let them trade. We show that risk sorting indeed is able to explain bubbles: markets with less risk averse traders exhibit stronger mispricing than markets with more risk averse traders.

Author(s): Balazs Sziklai, Agnes Pinter, Hubert J. Kiss, Laszlo Koczy

Topic: Markets: Finance, Decision Theory: Risk

Back to session: Behavior in Financial Markets and Incentives in Health Behavior (SHORT)

Reducing Mispricing in Bubble-prone Experimental Asset Markets

Christoph Huber
University of Innsbruck

ABSTRACT:

Typical bubbles-crash patterns have been observed many times in the field as well as in the lab. In this paper we run 35 experimental asset markets to explore possibilities to reduce mispricing in a bubble-prone, cash-rich constant fundamental value framework. In particular, we investigate whether experimental results are influenced by (i) changes in the visual representation of the price chart on the trading screen, or by (ii) providing subjects with complete information about the fundamental value process. We find mispricing and overvaluation to be reduced when the scale of price charts' vertical axis is manipulated in a way such that the price is displayed close to the upper boundary. In contrast to existing literature, however, we do not find price efficiency improvements by reducing confusion and inducing common knowledge about the fundamental value.
The winner takes it all, the loser's standing small: Social status and risk-taking in the Finance Industry

Stephanie Rosenkranz
Utrecht University

ABSTRACT:

We model a simple portfolio decision assuming that an investor's direct utility from her portfolio's return is a function of her intrinsic valuation for achieving a certain rank and of her valuation for money derived from the portfolio return. Additionally we assume that investment carries reputational costs and benefits, reflecting the judgments of others. We derive hypotheses regarding the effect of public announcements of the lowest or highest ranking investor, which we test in a high-stakes framed field experiment with 204 financial professionals from major financial institutions in several OECD-countries, and in the laboratory with 144 students per treatment. We find that as predicted reputational motives increase risk-taking strongly among students but we find no additional risk-taking among professionals. Intrinsic rank incentives capture most of the effect among financial professionals, but not among students.

Author(s): Michael Kirchler, Florian Lindner, Stephanie Rosenkranz and Utz Weitzel
Topic: Markets: Finance, Social Behavior: Other

Behavioral Investors?

Ciril Bosch-Rosa
UCSC

ABSTRACT:

One of the reasons of the recent crisis is that financial institutions were taking "too much risk" (Brunnermeier (2009), Taylor (2009)). Why were these institutions taking so much risk is an open question; a recent strand in the literature points towards the "cognitive dissonance" of investors, who, because of the limited liability of their investments, evaluate risk differently (e.g., Barberis (2011)). In a series of laboratory experiments we show how limited liability does not affect the beliefs of investors, but does increase their exposure to risk. This results points to a simple but discouraging explanation for the over-investment of banks and hedge-funds that led to the financial crisis: when incentives are not aligned, investors take advantage of the moral hazard opportunities.

Author(s): Steffen Ahrens and Ciril Bosch-Rosa
Topic: Markets: Finance, Social Behavior: Lying and Cheating

Unknown Probabilities and Unknown Outcomes: The Effect of twofold Ambiguity on Market Prices

Julia Rose
University of Innsbruck

ABSTRACT:
Uncertainty is an inherent feature of decision-making in finance. Most models, whether theoretical or experimental, are based on the assumption of known probabilities for known outcomes - risk in the classical sense. Whereas previous research extended these models to account for ambiguity (unknown probabilities for known outcomes), real-world financial markets are not only characterized by unknown probabilities, but also by unknown respective outcomes. In a 2x2 experimental design, we run experimental asset markets to clearly disentangle the effects of ambiguous probabilities and ambiguous outcomes on market prices. Additionally, we are able to identify a clear ambiguity premium by comparing both settings to a baseline standard risky market environment. In a third treatment, we analyze possible exponentiating effects in a market with complete ambiguity with assets that are both probability- and outcome- ambiguous. In line with previous literature, we expect market prices to be lower than in the baseline market for both kinds of ambiguous market settings. Additionally, we expect the complete ambiguous case to exhibit significantly lower observed market prices than the baseline and both other market settings. Moreover, we expect a significant ambiguity premium for all three kinds of ambiguity markets when compared to the baseline.

Author(s): Christoph Huber, Julia Rose
Topic: Markets: Finance, N/A

A Contingency Management Smoking Cessation Programme: Experimental Evidence From A Developing Country

Olivia Rusch
University of Cape Town

ABSTRACT:

Tobacco consumption is a pressing global issue, leading to more than six million deaths each year. In South Africa, the smoking prevalence rate is amongst the highest in the world, implying that a successful smoking cessation programme could have large social benefits, particularly if it targets young smokers whose lifetime exposure to cigarettes is low. Contingency management (CM) interventions, which provide cash transfers conditional on biochemically-verified abstinence, have been effective in bringing about increased smoking cessation rates. However, CM programmes are typically very costly and involve frequent monitoring. This paper evaluates a low-cost, low-intensity CM smoking cessation randomised controlled trial, coupled with the experimental elicitation of risk and time preferences, conducted on a sample of treatment-seeking student smokers at the University of Cape Town in 2017. There is a statistically significant treatment effect, that is robust across multiple specifications, which increases the likelihood of abstinence by 13-20%. However, noticeable declines in cessation rates were evident at the 3-month follow-up across treatment and control groups. Furthermore, subjects' experimental measures of risk and time preferences mediate the relationship between treatment status and abstinence. This study suggests that a low-cost, low-intensity CM smoking cessation programme is efficacious in promoting abstinence, but that sustaining abstinence may require a more intensive and prolonged intervention.

Author(s): Hofmeyr, A., Kincaid, H., and Rusch, O.
Topic: Field Experiments: General, Methodology: Experimental Design, Tools and Practices

How much information is incorporated in financial asset prices? Experimental Evidence

Lionel Page
QUT

ABSTRACT:

We use experimental data from multiple double auction experiments in the literature to estimate how much information
is incorporated in financial market prices. We find that public information is almost completely incorporated in prices, but that surprisingly little private information---less than 50%---is incorporated in prices. Our estimates therefore suggest that while semi-strong informational efficiency is a reasonable assumption, financial prices may be very far from strong-form efficiency. We compare our estimates with beliefs of economists surveyed at the Econometric Society Meetings, and find that economists and finance researchers alike expect market prices to reflect considerably more private information than what we estimated.

**Academic Debate: Improving Student Performance one Speech at a Time**

**Lenka Fiala**  
Tilburg University

**ABSTRACT:**

Academic debating has long been a popular extracurricular activity for high school students, and debate clubs have consistently claimed that debating makes students smarter and that debate experience is an asset in admission to universities. However, little empirical support exists for debating to actually benefit students, as all existing research suffers from endogeneity and/or small-sample concerns. This study looks at the effects of introducing key elements of competitive academic debating into Czech high school curricula. This includes structured debates on controversial topics where students are assigned to defend a particular side or policy, public speaking exercises, group discussions about information reliability from various sources, or writing policy proposals. Students participate in a series of mandatory workshops by experienced debate coaches, and their teachers are provided with supplementary materials to incorporate debating into regular classes. I measure the impact of the program in three areas: First, since debating is a competitive activity, I look at its impact on the (hyper-)competitiveness of students measured both by an incentivized (Niederle and Vesterlund, 2007) task, and a self-report (Cheng et al., 2010). Second, because debating aims to stimulate sound argumentation, I consider the effect on student school performance. This is measured by 1) actual grades students receive, 2) by their scores in standardized tests, and supplemented by 3) student and teacher reports of performance and motivation to learn. Finally, debating stresses the importance of respecting opposing views, and hence I test whether this affects social preferences of students: are those exposed to debating better able to cooperate with students who hold contrasting views on controversial topics, such as immigration policies? This field experiment is pre-registered at the AEA RCT Registry under the number AEARCTR-0001965.

**Heuristic to Bayesian: the Evolution of Reasoning from Childhood to Adulthood**

**Isabelle Brocas**  
University of Southern California

**ABSTRACT:**

In this experiment, children and teenagers learn the composition of balls in an urn through sampling with replacement. We find significant aggregate departures from optimal bayesian learning across all ages, but also an important developmental trajectory. Many of the youngest children (K to 2nd grade) base their decisions only on the last piece of information and use evolutionary heuristics (such as the 'Win-Stay, Lose-Switch' strategy) to guide their choices. Older children and teenagers are gradually able to condition their decisions on all previous information but they often fall prey of the gambler's fallacy. Only the oldest participants display optimal bayesian reasoning. These results are
Self-regulation training in primary schools. Evidence from a randomized controlled experiment

Daniel Schunk
University of Mainz

ABSTRACT:

Self-control abilities are known to be a central determinant of educational success and a wide range of other important life outcomes. We conducted a randomized-controlled experiment with about 600 first graders to identify the causal effect of a targeted self-regulation training on self-control abilities, concentration, and educational outcomes. Results demonstrate that our self-regulation training increases long-term outcomes 12 months after treatment for attention and inhibition abilities, self-control behavior, as well as reading abilities. There is no treatment effect on math abilities, fluid IQ, and on one of our concentration tasks. We conclude that targeted training of self-control abilities in early years can substantially improve these self-control abilities in the long run, that these improvements potentially serve as a multiplier for the promotion of schooling abilities, and thus that this kind of training might be an effective tool to foster the skill formation process.

Author(s): Daniel Schunk, Eva Berger, Henning Mueller, Kirsten Winkel, Ernst Fehr
Topic: Field Experiments: General, Psychology and Biology: Cognition

Grit in kindergarten children

Claudia Zoller
University of Cologne

ABSTRACT:

In an experimental setting we analyze the development of grit (defined as perseverance in a productive task) and its driving factors in early childhood. To measure grit we let over 400 children aged 3 to 6 work on a real effort task for as long as they preferred to. In a treatment variation some children were able to procrastinate the task to the next day. We find that higher levels of grit are correlated with high ability in the task and the willingness to challenge oneself in an unrelated task. Children who procrastinated displayed significantly lower levels of grit.

Author(s): Matthias Sutter, Anna Untertrifaller, Claudia Zoller
Topic: Field Experiments: General, N/A

Is there a `true' consensus effect?

Jana Willrodt
DICE, University of Duesseldorf

ABSTRACT:
A general assumption of standard economic theory is that preferences and beliefs are distinct and orthogonal. However, this is not readily justified by empirical evidence, e.g., intrapersonal correlations between first and 2nd mover choices in social dilemmas. This supports the existence an interdependence of preferences and beliefs ' the consensus effect. We use a longitudinal laboratory experiment to disentangle to what extent this interdependence is due to a deep underlying coexistence of preferences and beliefs rather than simultaneous measurement. To this end, we have subjects play both roles a binary trust game as well as elicit their beliefs about second-mover behavior. We do so either at the same point in time or two weeks apart. We find that the consensus effect is persistent but weaker if measurement is not simultaneous. This indicates that there is a 'true'consensus effect in social dilemmas but that it is smaller than may be inferred from previous research.

Author(s): Thomas Dohmen, Simone Quercia, Jana Willrodt
Topic: Decision Theory: Beliefs, Social Behavior: Other-regarding Preferences
Back to session: Beliefs 1: Biases

Changing economic misconceptions: A field experiment

Isabel Busom
UNIVERSITAT AUTONOMA DE BARCELONA, SPAIN

ABSTRACT:

Misconceptions about natural, economic and social issues are pervasive in society. Some of them persist even if contradicted by scientific analysis and evidence. Research in cognitive psychology shows that scientific evidence is often ignored even if people are exposed to information that contradicts a particular belief. When cognitive biases 'such as confirmation bias, blind spot bias, or self-serving bias- are at the root of some economic beliefs and of their persistence, simply providing evidence-based information will not lead to a replacement of entrenched views of the world. Even college students in STEM fields and psychology are affected by these biases. Recent work shows that students taking economic principles courses also stick to their previous beliefs. A potential way to face this problem when communicating or teaching expert knowledge is to take into account these cognitive biases and explicitly address misconceptions. In this paper we design and report the results of a field experiment to investigate the effect of a particular type of communication strategy on economics students' conceptual change: the refutational text, already used in college level psychology. Motivation: Tirole (2016) begins his recent book presenting economics to the general public by discussing the influence of motivated beliefs and cognitive biases on our understanding of economic phenomena. Our beliefs are often influenced by what helps us to have a positive image of ourselves and of the world around us. Similarly, we have a tendency towards avoiding facing unpleasant facts. We dream of a different world in which people don't need to be incentivized or monitored to behave in virtuous ways. Finally, we have a tendency to follow our first impressions and not think globally when evaluating a situation. Importantly, these tendencies are also present in very capable and educated people, evidencing that they have deep roots in our nature. These ideas owe a lot to the work of Kahneman and Tversky (2000), Kahneman (2011) and Thaler (2015) and have become quite influential in economics to help us understand the behavior of economic agents. Cognitive biases not only affect human decisions in a variety of contexts but, as Tirole describes, are often at the root of economic beliefs, some of which are at odds with much evidence supporting basic economic principles. Most existing research on economic education describes experiences with teaching methods aimed at improving students' academic performance: classroom experiments, case studies, cooperative learning, are some of them. While active instruction methods may succeed in improving grades (learning, or memorizing, to the exam) or student retention, intuitive beliefs, and thus misconceptions, may persist when students leave the classroom (Busom, Lopez-Mayan and Panades, 2017) if cognitive biases are not explicitly addressed by appropriate methods. Implications of cognitive biases for education decisions are discussed for example in Lavecchia, Liu and Oreopoulos (2016) and Levitt et al. (2016). Other areas of concern include the relationship between cognitive biases and financial decisions as well as implications for policy-making in several areas such as health and environmental policies. The implications for how academic economists communicate economic research have not been studied, to the best of our knowledge. In our role as economics communicators and teachers we also suffer from some biases. We believe that our students are motivated and rational. We ignore the importance of cognitive biases, emotions and attitudes when communicating economic knowledge. Consequently our instructional methods generally do not account for this: introductory economics manuals are expository texts that appeal directly to the rational, unbiased mind.
In this paper we use research findings in cognitive psychology to design a strategy for communicating and teaching economics. We investigate the effect of a specific type of in-classroom communication strategy aimed at fostering students' ability to question beliefs 'one's own and others' and to base judgments on slow thinking, developing critical and high-level thinking skills. We design a field experiment to test the effect of this intervention on students' economic beliefs. The experiment: Our experiment rests on the hypothesis that framing can affect the mind's judgement processes. We first design a questionnaire to survey students' beliefs at the beginning and at the end of the semester. We then design an instructional tool that is grounded in psychological research: the refutational text, which is a text that 'engages, challenges, and remediates common misconceptions' (Tippett, 2010; Kendeou et al. 2016). This tool has been used at college level in STEM fields, but not in economics (Masson et al., 2014), and constitutes the treatment in our field experiment. In writing the refutational text we choose a specific, popular misconception regarding the ability of rent controls to make housing accessible to more families, a misconception identified in our previous work (Busom, Lopez-Mayan and Panades, 2017). The text is about 1200 words long. We frame this issue in the context of the concern about the distribution of income; it states the misconception and discusses the negative, unintended consequences of this price control policy, as well as those of alternative policies. It includes some questions to make sure the students read, understand and use the information in the text. Our treated subjects are about 400 first-year college students enrolled in an Introduction to Economics course in a variety of degrees in social sciences fields (Business, Economics and Law degrees) at the Universitat Autonoma de Barcelona, Spain, in 2017. Our control group are first year students exposed to the regular, standard instruction method, taught by the same instructors the previous academic year. We also collect demographic characteristics for all of them so that students in the treated and control group can be matched. Steps of the experiment: 1. First day of class: we run the questionnaire to identify misconceptions 2. About the fourth week in the semester a lecture is devoted to the refutational text. 3. End of semester: we run a questionnaire to identify changes and degree of persistence of misconceptions. Results and Discussion We have collected all the data and are currently analyzing results. We first describe students' prior beliefs and explore their correlation with personal characteristics. Next, we identify changes in beliefs. The impact of the treatment (the refutational text) will be assessed by comparing changes in beliefs experienced by the treatment group to changes experienced by the control group, after double-checking that treated students and control group are indeed comparable in observed characteristics. References: Busom, I; C. Lopez-Mayan and J. Panades (2017). Students' persistent preconceptions and learning economic principles. The Journal of Economic Education, 48(2), 74-92. Kahneman, Daniel (2011). Thinking, fast and slow. New York: Farrar, Straus and Giroux. ISBN 9780374275631. Kahneman, D., & Tversky, A. (Eds.). (2000). Choices, values, and frames. Cambridge University Press. Kendeou, Panayiotis, Jason LG Braasch, and Ivar Bråten. 'Optimizing conditions for learning: Situating refutations in epistemic cognition.' The Journal of Experimental Education 84.2 (2016): 245-263. Lavecchia, A. M., Liu, H. and P. Oreopoulos (2016):'Behavioral Economics of Education: Progress and Possibilities'. Handbook of the Economics of Education, Elsevier, 5, 1-74. Levitt, S. D., List, J. A., Neckermann, S., and Sadoff, S. (2016). The behavioralist goes to school: Leveraging behavioral economics to improve educational performance. American Economic Journal: Economic Policy, 8(4), 183-219. Masson, S., Potvin, P., Riopel, M., and Foisy, L. M. B. (2014). Differences in brain activation between novices and experts in science during a task involving a common misconception in electricity. Mind, Brain, and Education, 8(1), 44-55. Thaler, R. (2015). Misbehaving: The Making of Behavioral Economics. New York: W. W. Norton & Company. ISBN 978-0-393-08094-0. Tippett, D. (2010). Refutation text in science education: a review of two decades of research. International Journal of Science and Mathematics Education, Volume 8, Issue 6, pp 951’970 Tirole, J. (2017). Economics for the Common Good. Princeton University Press.

Author(s): Brandts, J.; Busom, I.; Lopez-Mayan, C; Panades, J.
Topic: Field Experiments: General, Social Behavior: Other

Biases in Beliefs: Experimental Evidence

Irenaeus Wolff
University of Konstanz/TWI

ABSTRACT:
Many papers have reported behavioral biases in belief formation that come on top of standard game-theoretic reasoning.
We show that the processes involved depend on the way participants reason about their beliefs. When they think about what everybody else or another `unspecified' individual is doing, they exhibit a consensus bias (believing that others are similar to themselves). In contrast, when they think about what their situation-specific counterpart is doing, they show ex-post rationalization, under which the reported belief is fitted to the action and not vice versa. Our findings suggest that there may not be an `innocent' belief-elicitation method that yields unbiased beliefs. However, if we `debias' the reported beliefs using our estimates of the different effects, we find no more treatment effect of how we ask for the belief. The `debiasing' exercise shows that not accounting for the biases will typically bias estimates of game-theoretic thinking upwards.

**Author(s):** Dominik Bauer, Irenaeus Wolff  
**Topic:** Decision Theory: Beliefs, Psychology and Biology: Cognition  
[Back to session: Beliefs 1: Biases](#)

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**Biases Over Biased Information Structures: Confirmation and Contradiction Seeking Behavior in the Laboratory**

Sevgi Yuksel  
UC Santa Barbara  

**ABSTRACT:**

We study choices among information structures that are characterized by different biases. Bias is introduced via either distortion, through possibility of false reports as in cheap talk games of Crawford and Sobel (1982), or via filtering, through possibility of strategic omission of information as in disclosure games of Milgrom and Roberts (1986). The experimental design exploits how the optimal information structure depends on one's prior and the form of the bias-filtering or distortion. Typing subjects based on their choices in a series of questions spanning these cases, we find strong evidence for confirmation, contradiction and certainty seeking behavior. This is particularly surprising given that traditional explanations for confirmation or contradiction seeking behavior are shut down in our design. We discuss implications of our results in the context of political information and the role of media bias.

**Author(s):** Gary Charness, Ryan Oprea and Sevgi Yuksel  
**Topic:** Decision Theory: Learning, Decision Theory: Beliefs  
[Back to session: Beliefs 1: Biases](#)

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**No chance: Over-inference with limited attention**

Raul Lopez-Perez  
Universidad Autonoma de Madrid  

**ABSTRACT:**

We present a quasi-Bayesian model of how people evaluate the frequency or rate of occurrence of some repeatable event when they display limited attention, comparing inference by Bayesian and limited agents. In the model, agents have prior beliefs about the rates that they consider feasible. Given new data, those priors are updated by Bayes' law. While any Bayesian agent considers all rates in the objective sample space or support, however, a limited agent may omit several of them. Under precise conditions, the model predicts over-inference 'i.e., lack of due doubt, so that subjective credible intervals are a contraction of the Bayesian ones' and a relative insensitivity to sample sizes, so that people jump to strong conclusions even when the evidence is statistically weak. We also report new experimental evidence in line with the theoretical model.

**Author(s):** Raul Lopez-Perez and Marc Vorsatz  
**Topic:** Decision Theory: Beliefs, Decision Theory: Bounded Rationality  
[Back to session: Beliefs 1: Biases](#)
Performance Beliefs and Allocation of Teamwork: An Experiment

zahra murad
University of Portsmouth

ABSTRACT:
Decision making in teams or groups constitutes a critical and ubiquitous component of economic decision making. Firms regularly assign teams of workers to work on specific projects, political or business organizations may form committees or legislatures, professors may collaborate with others on research papers, and students often work together on group projects. As a result of the importance of understanding team decision making and dynamics, a large literature exists in the social sciences, particularly in social psychology, which has attempted to determine differences between team versus individual decisions. At the same time, a growing body of theoretical and empirical literature documents instances of overconfidence and in particular how overconfidence affects individual outcomes. A number of recent studies, e.g. Niederle and Vesterlund (2007), have noted important gender differences in overconfidence and preferences for competition. Despite the fact that overconfidence is likely to be an important factor in the dynamics of team decision making, there has been very little research on examining how overconfidence might alter decision making and delegation of work in teams. We develop a simple theory of delegation of work in teams. To examine the theory and potential deviations we conduct an experiment to investigate how beliefs about ones' ability and beliefs about others' abilities affect the dynamics of team decision making. Our model investigates the effect of aggregate team feedback on individual delegation of work decisions. The model predicts that when feedback is about team rather than individual performance, prior confidence plays a critical role in decision making and team outcomes. Specifically, overconfident individuals become more confident from feedback, purely through Bayesian updating. The result is that overconfident individuals end up more extreme (confident) in their beliefs, despite the fact that they use Bayes' rule to update beliefs. Similarly underconfident individuals end up with more extreme beliefs, but in the opposite direction of underconfidence.

In the experiment, designed to test the theory, individuals must all participate in a test similar to IQ style intelligence tests. We further track individual beliefs about ability, and examine how individuals behave in team settings. The experiment follows a stylized model of delegation, where individuals are placed in two person teams and must determine the optimal weight between their own performance and the performance of their teammate. Payoffs are determined by a concave weighting function of the weights chosen, ensuring extreme weighting is never optimal. We also generate a novel procedure to elicit beliefs indirectly, by providing subjects with the ability to calculate optimal weights, given beliefs. We further provide feedback about overall team performance. A large component of our experiment involves conducting a counterfactual weighting task, where subjects have to choose the weight for another individual who takes the same test. This counterfactual critically allows us to distinguish whether differences in behavior are due to ego concerns, or simply a result of the decision task or environment. Our results are as follows. Similar to previous studies, we find that males exhibit significantly more overconfidence then females in test performance. However our experiment uncovers a novel implication of overconfidence. After receiving 4 rounds of feedback, men assign over 25% greater weight to their performance rather than a teammate, relative to the control. For women, there is no difference in assigned weights, relative to the control. The implications are critically important for decision making in teams. In particular the experimental results suggest that in teams, there may be important gender differences in delegation. Specifically, in delegation of work decisions, men may delegate too much work to themselves, which may lead to worse outcomes for the entire team.

Author(s): Alexander Coutts, Leonie Gerhards and Zahra Murad
Topic: Decision Theory: Beliefs, Decision Theory: Bounded Rationality

Cognitive biases fuel popularity of lottery strategies

Raman Kachurka
University of Warsaw
ABSTRACT:
Popularity of lotteries around the world is a behavioral puzzle to the neo-classical theory. In this paper we study one factor which might contribute to this popularity, namely lottery 'strategies' that could allegedly improve players' odds. Browsing through the Internet and books we amassed the largest dataset of lottery strategies in existence. Then we analyse their descriptions, categorize them, and investigate how they exploit their target audience's behavioural biases, including illusion of control, magical thinking, authority bias, representativeness heuristic and gambler's fallacy. This exploratory work sets stage for the design of experiments testing how specific features of strategies may trigger (possibly excessive) lottery play.

Author(s): Michal Wiktor Krawczyk, Raman Kachurka
Topic: Decision Theory: Beliefs, Decision Theory: Other
Back to session: Beliefs 2: Information Processing

Information Processing & Sea Level Rise
Matthias Mayer
University Marburg

ABSTRACT:
I developed a survey experiment to measure confirmation bias; the tendency to evaluate, interpret and search for information in a way that confirms prior beliefs. I applied this design in Solomon Islands to analyze individual evaluation of scientific evidence on sea level rise and its consequences for low-lying islands in the Pacific. The natural setting in Solomon Islands allows me to distinguish between highly affected individuals living on small low-lying islands, and less affected individuals living on larger islands with hills and mountains. Conceptual and self-affirmation primes were implemented to further explore the dynamics of this bias. Given the simplicity and the possibility to integrate this design into any survey, it offers a new tool to measure confirmation bias in a comparable way across multiple topics and to test the effectiveness of different interventions proposed in the literature.

Author(s): Matthias Mayer
Topic: Decision Theory: Beliefs, Psychology and Biology: Cognition
Back to session: Beliefs 2: Information Processing

Attribution biases in leadership: Is it effort or luck?
Boon Han Koh
University of Melbourne

ABSTRACT:
Leaders often have to make decisions under uncertainty. Using a controlled laboratory experiment motivated by a simple theoretical framework, we investigate followers' beliefs about the effort decisions of their leader in an environment where only outcomes are observable. We examine whether they attribute leaders' success (or failure) to effort or to luck. We consider three different leadership appointment mechanisms: imposed, random, and group assignment. Followers' beliefs respond to the leadership appointment mechanism. Moreover, the followers are biased when they update their beliefs upon observing the outcomes of their leaders' decisions. Relative to the Bayesian benchmark, followers apportion leaders the same amount of blame for their failures, but they give too little credit for their successes. In addition, followers suffer from base-rate neglect in that they place too little weight on their prior beliefs as compared to a Bayesian when they observe outcomes of the leaders that contradict with these prior beliefs. We find that these biases in updating behavior do not tend to depend on the leadership appointment mechanism.

Author(s): Nisvan Erkal, Lata Gangadharan, Boon Han Koh
Topic: Decision Theory: Beliefs, Psychology and Biology: Cognition
Back to session: Beliefs 2: Information Processing
Task difficulty and overconfidence. Evidence from distance running.

Michal Krawczyk
University of Warsaw

ABSTRACT:
In this project we investigate the impact of task difficulty on overestimation, using data from over 1.6 million amateur distance runners. Overestimation is measured in terms of relative error in forecasted finishing time as well as relative slowing down in the latter half of the course. Longer (esp. the marathon compared to 10km) and slower races are understood to be more difficult than shorter and faster races. Likewise, comparatively slow runners are assumed to be facing a relatively difficult task. The general finding is that greater task difficulty leads to greater overestimation, a clear tendency only weakly moderated by demographic variables such as gender and age.

Author(s): Michal Krawczyk, Maciej Wilamowski

Does Competition Trigger and Boost Overconfidence?

Vojtech Zika
Charles University in Prague

ABSTRACT:
Overestimation is one's impression that his ability, performance or level of control is higher than it actually is. Together with overprecision and overplacement, this concept constitutes one of the most robust biases known in behavioral economics - overconfidence. This bias frequently prevents decision-makers from making rational choices as judged by the standard economic theory, however, from the perspective of the evolutionary rationality, the overconfidence might be advantageous as it encourages individuals to claim resources they could not otherwise win in a competition. If the overconfidence is signaling or bluffing strategy then it should follow that as the competition gets more salient the individual's ability to evaluate her performance realistically declines. In an effort-task based laboratory experiment (N=214) we have confirmed that the level of competition has some significant effects on the overprecision as well as on the overplacement. Additionally, our data - contrary to some literature - suggest that women's performance in tournament-based conditions is not worse compared to non-tournament conditions.

Author(s): Vojtech Zika, Jan Jolic

The Biases of Others: Anticipating Informational Projection in an Agency Setting

David N Danz
University of Pittsburgh & WZB

ABSTRACT:

Author(s): Stephanie W. Wang und Kristof Madarasz
Belief distributions, confidence and Bayes rule

Todd Swarthout
Georgia State University

ABSTRACT:

The theory of Bayesian updating postulates posterior distributions that follow from prior distributions. However, past laboratory investigation of the theory has focused on the elicitation and subsequent analysis of only a point estimate of a distributional statistic -- typically the mean. Unfortunately, focusing on only a point estimate does not account for any uncertainty or confidence that a respondent may have. In a new Bayesian updating experiment, we avoid these issues and elicit non-degenerate belief distributions from subjects who observe repeated draws from an ambiguous urn. By eliciting distributions, we are able to assess not only whether reported means adhere to the principle of Bayesian updating, but also whether respondents are under-confident or over-confident relative to the Bayesian norm.

Author(s): Glenn W. Harrison and J. Todd Swarthout

Experimental evidence on eliciting point predictions using objectively known distributions

Thibaud Pierrot
WZB

ABSTRACT:

In this paper, we study point predictions human forecasters report when being asked to predict the realization of an iid random variable. More precisely, we set up a laboratory experiment where participants are forecasters who predict the next realization of random draws coming from a distribution that is 'objectively known.' We used several distributions that we constructed such that the location of the central tendencies vary. In the experiment, we elicited forecasters' point predictions in four treatments, in which we ask either for (1) a 'guess' of the next draw, as standard in survey measures, (2) a 'guess' as close as possible to the next 6 draws, and (3) the mean, (4) or the median of the next 6 draws. We compare those predictions to three central tendencies (mean, median, mode) and (i) study how close they are, (ii) investigate the cognitive process that affects the production of point predictions, and (iii) compare different ways of eliciting predictions. We find that the majority of predictions in the two guess treatments lay close to one of the three central tendencies, with a majority laying close to the mode. In the 'one guess for 6 draws' treatment, the mean and the median are more often reported in comparison to the 'guess for one draw,' but the mode remains the central tendency around which most of the predictions are located. However, forecasters are able to adjust their forecast in direction of a particular central tendency when specifically being asked to report the mean or the median. Adjustments are more precise for forecasters with higher numeracy measures and those who have more experience. Numeracy also explains some reporting behaviors in the 'guess for 6 draws' treatment but has no explanatory power when the subjects are asked for a guess for one draw. In the latter treatment, predictions of forecasters with more experience and of those who take more time to produce a forecast are closer to the mean and median. Although, asking for guesses is the most frequently used prediction method, some surveys have already started asking for a particular central tendency of a person's subjective distributions. However, to the best of our knowledge, we provide the first experimental test of asking forecasters to predict a particular point.

Author(s): Sabine Kroeger, Thibaud Pierrot
Expectation-Based Psychological Games and Psychological Expected Utility

Stephan Jagau
Universiteit van Amsterdam

ABSTRACT:

Psychological game theory has proven to be a potent framework for modeling belief-dependent motivations and emotional mechanisms such as surprise, anger, guilt, and intention-based reciprocity. At the same time, general psychological games significantly raise the complexity bar relative to traditional games and many crucial properties that make the latter easy to work with fail to carry over to the former. Hence it becomes an important issue in itself to figure out which psychological games are tractable enough to be useful for applications in behavioral and experimental economics. Here we present a major step towards this goal by identifying a large class of psychological games within which a meaningful extension of expected utility is possible. In these expectation-based games, utility depends on recursively constructed summary statistics of players' higher-order beliefs. We argue that expectation-based psychological preferences have a natural and attractive decision-theoretic interpretation and we show that all applications of psychological games in the literature are expectation-based and admit the psychological expected utility representation. Moreover, we exploit the special structure to develop a generalization of traditional iterated elimination of strictly dominated choices that is shown to be just as tractable as that traditional procedure. In particular, all commonly studied psychological games turn out to be numerically solvable using standard techniques based on linear programming.

Author(s): Stephan Jagau, Andres Perea
Topic: Decision Theory: Beliefs, Games: Other
Link: https://drive.google.com/open?id=1wG1NXjnyRViAb8Yv9eZPSa8KWjG2T3fz
Back to session: Beliefs 4

Higher-order Learning

Piotr Evdokimov
ITAM

ABSTRACT:

Author(s): Umberto Garfagnini
Topic: Decision Theory: Beliefs, Games: Other
Back to session: Beliefs 4

Product Testing in Markets for Experience Goods

Florian Spitzer
WU Vienna

ABSTRACT:

We test the effectiveness of a product testing institution in a market for experience goods where reputation formation is not feasible. In our set-up, sellers commit ex ante to a quality level (high or low). Buyers can additionally to buying immediately and leaving the market pay a fee to get a noisy signal about the quality chosen by the matched seller. We show the existence of a mixed perfect Bayesian equilibrium in which sellers provide high quality with positive probability whereas buyers are mixing between buying immediately and acquiring information. We vary the cost of the signal such that the mixed equilibrium does exist in a low-cost treatment but not in a high-cost treatment. The
experimental results show that the signal improves efficiency, but not as much as predicted by theory. Surprisingly, also the expensive signal which is predicted to have no effect, improves efficiency compared to a control treatment where no signal is available.

Author(s): Florian Spitzer  
Topic: Games: Information, Markets: Industrial Organization  
Back to session: Beliefs and Information

Reputation formation with competitive investors

Michael Seebauer  
FAU Erlangen-Nuremberg

ABSTRACT:

We investigate patterns of information transmission and its effects on transfer and return rates in a standard trust game where investors compete in a tournament and costless reputational information about responders can be exchanged between individual buyers within a population but does not become public. We vary the nature of information that could be transmitted (either a subjective rating or the objective details of a transaction) and compare the level of information exchange to a treatment without competition among investors. We find that competition among investors decreases information transmission substantially and significantly, but the nature of information only affects information transmission decisions without competition. When investors compete they exhibit lower transfer rates and profits, while responders return lower rates and are only able to significantly increase their profits when information is objective. We find evidence that in a competitive environment investors deliberately use subjective information to mislead their competitors.

Author(s): Martin Abraham, Veronika Grimm, Christina Nee?, Michael Seebauer  
Topic: Games: Information, Games: Repeated Games  
Back to session: Beliefs and Information

Everyday econometricians: Selection neglect and overoptimism when learning from others

Kai Barron  
UCL

ABSTRACT:

There are many important decision problems where learning through experimentation is costly or impossible, but where agents can learn from observing the outcomes of others who have made similar decisions before them. Often, however, information about others comprises a selected dataset, as outcomes are observed conditional on a specific choice having been made. In this paper, we design an investment game which allows us to study the influence of selection when learning from others. Using Jehiel's (2017) theoretical study as a guide, we test (i) for the presence of selection neglect in this context, (ii) its persistence when additional information is present and learning from own experience is possible, and (iii) the comparative static predictions of the model. We find strong evidence for selection neglect which survives even if subjects know the data generating process. We demonstrate that this generates overoptimism and overinvestment, suggesting a potential underlying mechanism for entrepreneurial overconfidence. As theoretically predicted, the degree of selection neglect increases when other decision makers become more rational. Finally, we show that when experimentation is possible, the negative effect of observing selected data is somewhat alleviated.

Author(s): Kai Barron; Steffen Huck; Philippe Jehiel  
Topic: Games: Information, Decision Theory: Beliefs  
Back to session: Beliefs and Information
A new mechanism for product tests a la Consumer Reports, Stiftung Warentest, Which? and Co.

Franziska Brendel
Universitaet Duisburg-Essen

ABSTRACT:

Often, sellers are better informed about product quality than buyers. This asymmetric information may decrease both consumer and producer surplus (Akerlof, 1970). One potential remedy is to provide credible information about product quality (Viscusi, 1978). This remedy has been institutionalized to some degree in several countries in form of independent product testing organizations, e.g. Consumer Reports (US), Stiftung Warentest (Germany) and Which? (UK). They offer many advantages. Yet, the provided information may neither be optimal for buyers nor for sellers due to the mechanism how product models are selected for a test with limited capacities. In particular, there may be product models among the non-tested ones which dominate the tested product models, but have simply not been selected for a test. We propose a new, budget-neutral mechanism which allows sellers to apply for a test and to, in principle, voluntarily and credibly disclose their product quality. In a controlled lab experiment, we study markets with asymmetric information and compare two mechanisms: a simplified version of one of the major European product testing organizations (Stiftung Warentest) and our new mechanism. With our new mechanism, information unravels and consumer surplus increases. Moreover, profits of sellers with non-dominated products increase while profits of sellers with dominated products decrease. These results are robust even when sellers can overstate their product quality when applying for the product test.

Author(s): Franziska Brendel, Christiane Ehses-Friedrich, Ulrike Vollstadt
Topic: Games: Information, Social Behavior: Lying and Cheating

Are wives more cooperative than husbands? Experimental evidence from Ethiopia

Kjetil Bjorvatn
Norwegian School of Economics (NHH)

ABSTRACT:

We test married couples' willingness to cooperate in a series of lab experiments in Ethiopia and find that husbands in general are more cooperative than wives. We explain this finding by a fairness norm dictating that the husband, as the main breadwinner, should provide for his wife and contribute to the household common goods. We find no gender differences in cooperation between strangers, in general altruism, in prioritizing of household goods or children, or in attitudes to risk and efficiency.

Author(s): Kjetil Bjorvatn, Tigabu Degu Getahun, Sandra Kristine Halvorsen
Topic: Psychology and Biology: Gender and Individual Differences, N/A

Benefiting from Our Biases: Modifying the Save-More-Tomorrow(TM) Principles to Increase Savings among Thai Military Officers

Phumsith Mahasuweerachai
Khon Kaen University

ABSTRACT:
Saving is the principal source of fund for most people after retirement. Saving too little today means lower quality of life after retirement. Although, most people know saving is important, few succeed in saving enough. In this study, we conduct a field experiment using concepts from the well-known Save More Tomorrow program to enhance saving among military officers in the Royal Thai Army. Subjects in the treatment group are randomly assigned to enroll to the program unless they opt out. The source of saving increases only comes from increases in their future salary. The preliminary findings from the implementation suggest a high chance of success in increasing savings. The majority of the subjects in the treatment group (98 percent) remain in the program after two pay raises, and their saving rate is going up. On the other hand, saving rate of subjects in control group is continuing to decline even their salary is also on average evenly increased compared to those in the treatment group. Our study serves as further evidence that insights from behavioral economics are vital as a policy tool, and that they are widely applicable even across cultural settings.

Author(s): Phumsith Mahasuweerachai; Anucha Mahariwirasami
Topic: Field Experiments; General, Applied Economics: Other

Why labor supply is a substitute for saving and whether this explains precautionary behavior

Andreas Orland
Universitaet Potsdam

ABSTRACT:

We uncover a novel behavioral strategy that makes intertemporal substitution possible even if saving is not possible: Starting from the standard model of intertemporal substitution in consumption and labor supply (e.g. Low 2005 or Floden 2006), we relax the strong assumption that wage changes coincide with the periodicity of labor supply. In our extended model, if wage risk is time-varying and work-time allocation is allowed, subjects may exploit differences in wage risk for intertemporal substitution by allocating time between two work-shifts. In order to test our model, we design laboratory experiments. In four treatments, subjects can either save, allocate time, or both, or cannot save nor allocate time. The results show that subjects engage in both precautionary savings and precautionary labor supply as predicted. Subjects also regard these behavioral strategies as substitutes, though substitution is not perfect.

Author(s): Andreas Orland, Davud Rostam-Afschar

Be Positive and See Yourself Burdened with Debt? On the Effect of Biased Expectations on Over-Borrowing

Melanie Koch
DIW Berlin

ABSTRACT:

As an emerging market economy, Thailand experiences increasing borrowing opportunities for households. Borrowing decisions require the formation of return expectations, meaning that biased expectations could bear severe consequences. In the worst case, over-borrowing can push households from above to below the poverty line. We conducted a field experiment in rural Thailand to assess how biased return expectations, induced by over-confidence, influence consumption behavior. In the experiment, returns directly depend on relative performance in a real-effort task. Participants get the opportunity to buy products for a strongly discounted price with their earned money. However, they have to indicate their buying decision before returns are realized which assigns individual return expectations and self-confidence a crucial role. By exploiting the so-called hard-easy gap, we exogenously vary participants' level of self-confidence for the task, which especially worked for female participants. Preliminary results suggest that over-
Testing Obvious Strategy Proofness: The Case of Auctions

Sebastian Schweighofer-Kodritsch
HU & WZB Berlin

ABSTRACT:
Based on a formal notion for 'obviousness' of a dominant strategy, Li (2017) proposed obvious strategy proofness (OSP) as a novel criterion for mechanism design. We designed an experiment to disentangle the role of such 'obviousness' of dominance from that of presentation and information design, respectively, in explaining the much greater degree of dominance play in ascending-price auctions than in (sealed-bid) second-price auctions. Comparing several different auction formats/treatments, we find that the effect of requiring obviousness is mainly due to a presentation effect. Framing bids in a second-price auction as exit prices in a subsequent ascending-clock auction produces essentially the same degree of dominance play, but violates OSP. We also find a positive effect of dropout information in the ascending-clock auction (which is not required for OSP), in enhancing dominance play. We conclude that our evidence for effects of presentation and information is good news for behavioral mechanism design, since OSP-implementation is often not feasible, and even when it is, it does not conflict with the additional use of those other tools.

Learning in contests with payoff risk and foregone payoff information

Aidas Masiliunas
Aix-Marseille University

ABSTRACT:
It is not well understood why game theory explains behavior in some games, but not in others. Tullock contest is an example of a game in which choices significantly deviate from Nash equilibrium predictions, and it is not clear why. We test a hypothesis that deviations are caused by slow convergence of a boundedly-rational learning process. We identify two elements of the game that slow down payoff-based learning, and eliminate them in an experiment. First, the distribution of payoffs generated by each action depends on opponent's action that varies over time. We eliminate this source of payoff variability by providing foregone payoff information, allowing all actions to be evaluated against the same sequence of opponent's actions. The second element is payoff risk, which slows down learning by reducing the correlation between realized and expected payoffs. We manipulate payoff risk using a 2x2 design: payoffs from contest investments are either risky (as in standard contests) or safe (as in proportional contests), and payoffs from the part of endowment not invested in the contest can also be either safe (as in standard contests) or risky. We find that Nash equilibrium rates go up to 100% when payoff risk is not present and foregone payoff information is available, but are at most 20% in all other cases. This result can be explained by payoff-based learning but not by other theories that might interact with payoff risk (non-monetary utility of winning, risk-seeking preferences, spitefulness, probability weighting, QRE). We propose a hybrid learning model that combines reinforcement and belief learning with preferences, and show that it fits data well, mostly because of reinforcement learning.

Author(s): Aidas Masiliunas
Unavailable Options and Irrelevant Attributes

Erkut Ozbay
University of Maryland

ABSTRACT:
This paper experimentally investigates the effect of introducing unavailable alternatives and irrelevant information regarding the alternatives on the optimality of decisions in choice problems. We find that interaction between the unavailable alternatives and irrelevant information regarding the alternatives generates suboptimal decisions. Irrelevant information in any dimension increases the time costs of decisions. We also identify a pure 'preference for simplicity' beyond the desire to make optimal decisions or minimize time spent on a decision problem. Our results imply that the presentation set, distinct from the alternative set, needs to be a part of decision making models.

Author(s): Ian Chadd, Emel Filiz-Ozbay, Erkut Y. Ozbay

You Dislike Risk? Then Do Not Search by Characteristic: A Lottery-Choice Experiment

Mauro Papi
University of Aberdeen

ABSTRACT:
Motivated by the diffusion of online choice platforms, such as mortgage comparison shopping websites, we investigate whether inducing subjects to explore a set of risky options by characteristic or by alternative has an effect on their welfare. We propose a lottery-choice experiment consisting of two tasks. In task 1 we elicit subjects' risk preferences and in task 2 we induce subjects to use either characteristic-based or alternative-based search procedures. We find that encouraging subjects to search by characteristic systematically makes them choose riskier options. Our results are robust to variations in the complexity of the choice problem. Our interpretation is that inducing subjects to explore the feasible set by characteristic (as opposed to by alternative) increases the salience of the `potential return' as opposed to the salience of the risk associated with it. We conclude by drawing policy implications of our results.

Author(s): Luigi Mittone (University of Trento) and Mauro Papi (University of Aberdeen)

Information hoarding in private learning and social learning settings

Sen Geng
Xiamen University

ABSTRACT:
People learn about the state of the world from observing private signals (private learning) or from observing others'
actions (social learning). While existing experimental evidence suggests that people may treat the information inferred from actions differently from the information included in signals even if both contain identical informational contents, the interpretation is confounded. We design a novel experiment in which their difference can be cleanly tested and find that people value social learning lower than private learning significantly. We propose a new belief disturbance model in which the posterior is assumed to be random but with a mean of the Bayesian posterior and conduct a structural estimation, which suggests the different valuation is due to both the posterior noise and people's viewing others' posterior noise greater than theirs.

Author(s): Bogachan Celen, Sen Geng, Huihui Li
Topic: Decision Theory: Learning, Decision Theory: Beliefs
Back to session: Bounded Rationality 2: Complexity

Is the attraction effect fast or slow? A choice process experiment.

Alexia Gaudeul
Georg-August-Universitaet Goettingen

ABSTRACT:
We run an incentivized choice process experiment along the lines of Caplin et al (2011) and consider the robustness of the attraction effect to differences in prices between the target and the competitor (Crosetto & Gaudeul, 2016). We also investigate differences between artificial choice settings and more realistic choice contexts. We find that the attraction effect is not robust to larger differences in prices and that it emerges for the most part only in the early stages of the search process. Consumers provisionally choose the target to avoid the decoy and then progressively switch from the target to the competitor until their respective choice shares come to correspond to price differences only. We expand our analysis by considering differences in individuals' response modes (intuitive vs. deliberative) and differences in the way to present choices (numerical or graphical). This allows us to ascribe more precisely the role of fast and slow cognitive process in the emergence and disappearance of the attraction effect.

Author(s): Paolo Crosetto and Alexia Gaudeul
Topic: Decision Theory: Bounded Rationality, Decision Theory: Preferences
Back to session: Bounded Rationality 2: Complexity

Assessing choice overload in a complex environment

Chris Starmer
University of Nottingham

ABSTRACT:
We study choice overload and subjects' performance in a novel experimental paradigm. Choice overload, the notion that agents may be better off with a strictly smaller choice set, has received considerable attention. But this is difficult to reconcile with the structure of consumer retail markets: the success of supermarkets and online retailers such as Amazon can to a large extend be attributed to the enormous amount of options they offer. Replication studies and meta-analyses also cast doubt on the findings and generalizability of the existing literature. Our study investigates choice overload and its effect on subjects' choices in a systematic way. Our environment allows us to manipulate candidate determinants of choice overload to assess their consequences for 'successful'choice. In a given round, subjects face a large array of multi-attribute objects of which they will ultimately select one. Attributes are initially hidden, and subjects have a fixed amount of time to investigate the objects and make their selection. In treatment variations, we manipulate the size of the choice set and the way in which attribute values map into subjects' payoffs. Based on a preliminary experiment, we choose four treatments with choice set sizes of 9, 14, 24 and 52 objects. How attributes map to payoffs is important to investigate whether choice overload is more likely to occur in complex environments and where decision makers have to 'consult'or 'construct their own preference. Payoff from an option is either the average of its attributes, i.e. the expected
value; or the attributes are lottery outcomes. We assess subjects' performance by how well the ultimately chosen object matches their preferences. Each consideration set that subjects face is populated by a fresh random draw from a Grand Set of 1000 objects. A subject has performed 'well' in a given round the higher up the chosen object is on the individually-ranked Grand Set. In the case of the treatment where objects represent averages, this is simply a ranking of the expected values. In the treatments of lottery outcomes, we assess performance through separately elicited Cumulative Prospect Theory parameters. This provides us, for each subject for each round, a rank from 1 (worst object chosen) to 1000 (best object chosen). Our main results show that performance is negatively and significantly related to the size of the choice set. Subjects perform significantly worse as the choice set size increases. This result is strong support for choice overload, and in contrast with the prediction of standard economic theory, where an expanding choice set would always (weakly) increase utility. In the treatments with larger choice set sizes, subjects could perform significantly better by focusing on fewer objects. But, due to the availability of more options, subjects spend more time on revealing attributes, and have therefore less time to evaluate the object's attractiveness. We also show that choice overload is more pronounced when objects are lotteries, and require evaluation under preferences, compared to when objects are averages.

Author(s): Robin Cubitt, Chris Starmer, Joerg Weber
Topic: Decision Theory: Bounded Rationality, Decision Theory: Other
Back to session: Bounded Rationality 2: Complexity

Psychological Opportunity Cost

Itay Sisso
Hebrew University

ABSTRACT:
A fundamental assumption in economics is that opportunity costs are only relevant in the decision-making process. When the decision is taken, however, these opportunity costs are considered as 'sunk' and people are assumed to consume the absolute level of utility of the chosen option. In this study, we consider the possibility that the opportunity costs created by the non-chosen alternative may reduce the experienced utility from consumption, even when this alternative is inferior to the chosen one (i.e. without experiencing regret). We denote the extent to which opportunity costs matter for post-choice utility as psychological opportunity costs and hypothesize that they are a direct function of the utility difference between the chosen and the non-chosen alternative. We test this claim in several discrete-choice-experiments with different good categories. We begin by measuring the subjects' preferences between 6 options. One week later, we treat participants with high (low) psychological opportunity costs by providing them the choice between options personally evaluated as their best and 2nd (6th) best option. Subsequently, we measure their satisfaction with the chosen good. Participants in the control group do not have to make any choice and simply receive what they considered as their preferred option. We find that the post-choice satisfaction is indeed significantly reduced with increasing opportunity costs and that treated individuals express lower satisfaction with the chosen alternatives compared to the individuals in the control group.

Author(s): Itay Sisso, Reto Odermatt, Fanny Brun, Benjamin Scheibehenne
Topic: Decision Theory: Other, Psychology and Biology: Emotions
Back to session: Bounded Rationality 3

Does relative thinking exist in mixed compensation schemes?

Ofer Azar
Ben-Gurion University of the Negev

ABSTRACT:
Several earlier studies have shown that people exhibit 'relative thinking': they consider relative price differences even
when only absolute price differences are relevant. The article examines whether relative thinking exists when people face mixed compensation schemes that include both fixed and pay-for-performance components. Such compensation schemes are prevalent in many occupations (e.g., salespeople and managers) and therefore are an important practical issue. Surprisingly, the ratio between the pay-for-performance and the fixed compensation does not affect effort, meaning that no relative thinking is found. Another experiment shows that this is not due to reciprocity that cancels out relative thinking. In a third experiment subjects make similar decisions without incentives and the results suggest that the different context (compensation schemes instead of price comparisons) and not the introduction of financial incentives (which were not used in previous studies) is the reason that relative thinking disappears. The results have implications for designing incentive schemes in firms and for designing experiments.

Author(s): Ofer H. Azar
Topic: Decision Theory: Bounded Rationality, Special Topic: Experimental Payments

Improving Dynamic Optimization in Life-Cycle Consumption Experiments

Luba Petersen
Simon Fraser University

ABSTRACT:
We implement an individual-choice consumption-smoothing experiment in which participants play the role of utility-maximizing consumers. Participants receive an exogenous stream of income, purchase and consume goods, and save in the form of bonds. The prices of goods are deterministic and known by the participants. We analyze how subjects' dynamic optimization compares to the predictions of a life-cycle model in environments with and without compounding return and dynamically fluctuating variables. We also investigate whether budgeting tools can improve financial planning. Non-choice data from the budgeting tools aids us in understanding where subjects exhibit difficulty optimizing. Finally, we explore whether subjects' ability to dynamically optimize is associated with subjects' financial literacy or cognitive abilities.

Author(s): Guidon Fenig and Luba Petersen
Topic: Decision Theory: Bounded Rationality, Decision Theory: Other

Unburden Renters by Making Landlords Pay the Commission? Evaluating a Policy Reform in Germany

Eva Berger
University of Mainz

ABSTRACT:
This paper evaluates the effect of the legal reform principle who orders pays (Bestellerprinzip) on rental prices in Germany. With the goal of unburdening renters the law prescribes that the payment liability of commissions for real estate agents appointed by landlords can no longer be shifted to the new renters (as it was common use earlier). Standard economic reasoning predicts the reform to not unburden renters as rents of concerned apartments would increase in a way to keep the total burden constant. We test this hypothesis against an alternative hypothesis based on behavioral insights predicting no or a weaker increase of rents. Using panel data of offer rents we apply a difference-in-differences strategy comparing rent changes (pre-post reform) of apartments with a commission prior to the reform to rent changes of apartments without a commission prior to the reform. Based on our results we reject the hypothesis of the reform making rents increase as predicted by standard reasoning; moreover, we cannot reject the behavioral hypothesis of the reform having no effect on rents. We thus conclude that the reform reaches the policy makers goal of unburdening
Sorting Into Incentives for Prosocial Behavior

Christian Johannes Meyer
European University Institute

ABSTRACT:
This paper studies incentivized voluntary contributions to a charitable activity. Motivated by the market for blood donations in Germany, we consider a setting where different incentives coexist and agents can choose to donate without receiving monetary compensation. This lets agents reveal and signal their individual preferences through their actions. In a model that interacts image concerns of agents with intrinsic and extrinsic incentives to donate, we show that this setting can bring about efficiency gains in the collection similar to those deriving from self-selection in second-degree price discrimination. We develop a laboratory experiment to test our theoretical predictions under controlled conditions. Results show that a collection system where compensation can be turned down can improve the efficiency of collection. Introducing the choice to be compensated does not crowd out unpaid donations. A significant share of donors chooses to donate without being compensated. Heterogeneity in treatment effects suggests gender-specific preferences over signaling.

Author(s): Christian Meyer, Egon Tripodi

Topic: Applied Economics: Charitable Giving, Social Behavior: Other-regarding Preferences


Back to session: Charitable Giving (SHORT)

Voluntary donations and reward oriented contributions: A field experiment on framing in a donation-based crowdfunding campaign

Maja Adena
WZB Social Science Research Center Berlin

ABSTRACT:
While increasingly popular in many domains crowdfunding remains largely under-researched and little is known about the best way to encourage participation and boost contributions. In an artefactual field experiment we implement a donation-based crowdfunding campaign for a club good—an institute's summer party with free food, drinks, and music—and test a 'donation' versus 'contribution' framing. We find that a 'donation' frame generates higher income than a straight 'contribution' frame. The individuals in the 'contribution' frame respond more strongly to norms concerning the levels of gifts while a fraction of individuals in the 'donation' frame give a substantially larger amounts. We also observe more bunching at different rewards in the 'contribution' frame while the gifts of individuals in the 'donation' frame more often exceed the reward threshold and vary more by (income) status. This suggests that a donation is perceived as a voluntary act while in a contribution frame the voluntary component is reduced. Using M-Turk, we replicate the experiment in an more controlled and abstract environment. Our results suggest that more experiments to explore the efficacy of crowdfunding campaigns may be as promising as experiments on charitable fundraising have proven to be.

Author(s): Maja Adena (WZB) and Steffen Huck (WZB & UCL)

The effect of information on dictator game giving towards an outgroup of refugees: A field experiment

Mario Mechtel
Leuphana University of Lueneburg

ABSTRACT:

Previous research has shown that individuals discriminate against outgroup members in economic decision-tasks (e.g., Chen and Li 2009, Hett et al. 2017, see also Social Identity Theory, Tajfel and Turner 1979). In this paper, we examine senders' economic decisions in a dictator game, given that the receiver belongs to a refugee outgroup. First, we find that providing stylized information about the perspective of the receiver influences senders' social preferences. Second, we show that political preferences matter substantially. Our data reveal that senders' political orientation moderates the effect of information on their social preferences: While the information treatment strengthens social preferences towards outgroup members for more left-wing oriented participants, the treatment effect on participants who favor more right-wing parties is even negative. Our experiment allows to derive policy implications on how attitudes towards refugees could be altered.

Author(s): Leon Bajrami, David Loschelder, Mario Mechtel
Topic: Applied Economics: Charitable Giving, Social Behavior: Other-regarding Preferences

The Customer as Donor: An Online Experiment on Sydney Opera House Sales and Donations

Franziska Tausch
University of Sydney

ABSTRACT:

We investigate how people interested in music and arts choose to spend money on the Sydney Opera House in an online experiment. Being a not-for-profit organisation, the Opera House not only sells tickets but also collects charitable donations for its maintenance and accessibility. The aim of this research is to find out whether sales and donations in a donor-as-customer organisational relationship are complements or substitutes. Therefore, we test how the implementation of donation matching affects ticket purchase and how ticket pricing affects donations. Furthermore, we examine the factors that influence the ticket-donation relationship and vary the recipient of the donation and the awareness that profits through ticket sales may be used for the same purpose as the collected donations.

Author(s): Kevin Schnepel, Robert Slonim, Franziska Tausch, Agnieszka Tymula

Promises undone: How committed pledges impact donations to charity

Adriaan Soetevent
University of Groningen

ABSTRACT:
The declining use of cash in society urges charities to experiment with digital payment instruments in their off-line fundraising activities. Cash and card payments differ in that the latter do not require individuals to donate at the time of the ask, disconnecting the decision to give from the act of giving. Evidence shows that people who say they will give mostly do not follow through. Our theory shows that having people to formally state the intended amount may alleviate this problem. We report on a field experiment the results of which show that donors who have pledged an amount are indeed more likely to follow through. The firmer the pledge, the more closely the amount donated matches the amount that was pledged. 45% of all participants however refuses to pledge. This proves that donors value flexibility over commitment in intertemporal charitable giving.

**Author(s):** Toke R. Fosgaard and Adriaan R. Soetevent  
**Topic:** Applied Economics: Charitable Giving, Field Experiments: General  
[Back to session: Charitable Giving (SHORT)]

### Recognition of needs in a dictator game: Experimental evidence on information-sensitive giving behavior

**Stefan Traub**  
Helmut-Schmidt-University

**ABSTRACT:**

We utilize a dictator game to analyze whether information about the neediness of recipients has an effect on transfers. Information about recipients which is provided to the dictators is varied between four treatments. We find a negative effect of both the recipient's income and the recipient's received social benefits on transfers. Recipient's requesting a relatively high payoff earn significantly less if no supporting information such as a long journey to the lab is provided. We conclude that (i) dictators are information-sensitive when they decide about transfers and (ii) the recognition of need depends strongly on whether supporting information is provided.

**Author(s):** Sabine Neuhofer, Fabian Paetzel, Manuel Schwaninger, Stefan Traub  
**Topic:** Applied Economics: Charitable Giving, Social Behavior: Norms and Morals  
**Link:** [http://bedarfsgerechtigkeit.hsu-hh.de/dropbox/wp/2017-10.pdf](http://bedarfsgerechtigkeit.hsu-hh.de/dropbox/wp/2017-10.pdf)  
[Back to session: Charitable Giving (SHORT)]

### Is Time on Our Side? On Benefits of Precommitting to Charities.

**Marina Chugunova**  
University of Hamburg

**ABSTRACT:**

In this paper, we consider how the timing of a donation decision relative to a production of disposable income affects charitable giving. We are interested in both the willingness to donate and the amounts donated as well as in the change in a labor supply of donors and donees, triggered by giving. In a real effort laboratory experiment with a subsistence income constraint, we study the effects of the interplay between risk-aversion and entitlement towards one's earnings. We find that more people pledge to donate if the decision is made before production. That is, entitlement towards one's earnings outweighs the risk-aversion and harms charitable giving. The labor response of donors is consistent with previous findings on the reference dependence of income. Our results suggest that a pre-commitment to giving is a viable strategy for charitable fundraising.

**Author(s):** Marina Chugunova, Andreas Nicklisch, Kai-Uwe Schnapp  
**Topic:** Applied Economics: Charitable Giving, Applied Economics: Labor Market  
[Back to session: Charitable Giving (SHORT)]
Optimal Incentives to Make a Charitable Donation

Ragan Petrie
Texas A&M University

ABSTRACT:

Individuals may have an interest in giving to charity but face costs to complete the gift. These could be psychic, time or just the nuisance of finishing the transaction. Such costs may be larger for some individuals than others. For instance, previous donors have gone through the process of completing a donation and should have fewer impediments than an individual who has never donated before or donates infrequently. If these impediments are sufficiently large, many individuals who would like to donate may end up not doing so. What might be the best way to reduce these costs to donate but also take into account that individuals face different costs? One approach is to match the first few dollars of a donation more heavily than later dollars. This will help those who face high initial costs to donate and also reduce the price of giving for larger gifts. An additional benefit of matching the first few dollars is that it frees the charity from having to determine the exact nature of these costs. Using a field experiment with over 120,000 unique supporters from 26 different nonprofits, we explore these questions using a matching design that reduces the price of giving at various thresholds of minimum donations (e.g. ‘make a donation of at least $X and the charity receives a match of $Y’). We use the 'kinks' that this incentive structure provides to estimate the price elasticity of giving and optimal incentives to give.

Author(s): Marco Castillo and Ragan Petrie
Back to session: Charitable Giving (SHORT)

Charitable Giving and Socioeconomic Status: Experimental Evidence from Bogota Stratification

Patricio Dalton
Tilburg University

ABSTRACT:

In spite of the growing literature about charitable giving, little is known about donors behavior in developing countries. Additionally, while the literature has tried to understand the relationship between donations and income, household income is not easy to identify. We address both issues using a lab experiment in Bogota, Colombia. We exploit the fact that Bogota is divided into six strata which are strongly correlated to household income. We ran a double-blinded dictator game where the recipient was the charity TECHO Colombia instead an anonymous counterpart. We twist the design in order to identify the stratum of each donor and to match that information with the amount donated. This allows us to correlate donations with strata. In order to account for different marginal utility of money across strata, participants decide their donation (in random order) for 3 different endowments (10, 18 and 25 USD), which match the per capita daily expenditure of households in stratum 2, 4 and 6, respectively. After all three decisions are made and envelopes sealed, each participant rolls a dice to determine the decision that will be paid out. We find no difference across strata in the probability to give and the amount donated, once we account for differences in income. We conclude that participants from higher strata are not more prosocial than the poorer. They simply donate more because they have more money to donate.

Author(s): Mariana Blanco and Patricio S. Dalton
Topic: Applied Economics: Charitable Giving, Social Behavior: Other-regarding Preferences
Back to session: Charitable Giving (SHORT)

Religious Bias in Charitable Giving
Arthur Schneider  
Trinity College  

ABSTRACT:  
Responding to the studies exploring the extent of islamophobia in the United States, we investigate the existence of a religious bias in charitable giving. We develop and implement a two-stage field experiment in which participants are asked to choose between one of the three charities. On the first day of the study, 100 participants had to choose between a neutral charity and two others providing educational and athletic opportunities to children who are Christian. On the second day, 101 different participants had to choose between a neutral charity and two others providing educational and athletic opportunities to children who are Muslim. We find no difference in proportion of people allocating the money to educational and athletic charities in comparison to the neutral charity regardless whether the recipients are Christian or Muslim. We conclude that the extent of islamophobia and a religious bias against Muslims seem to be greatly exaggerated, at least in some geographic areas of the US and at least for some population groups.

Author(s): Dana Gionfriddo, Brian Grasso, Sam Johnson, Yichen Li, and Arthur Schneider  

Religious discrimination and altruistic preferences in children: Evidence from a field experiment in India

Pooja Balasubramanian  
University of Goettingen  

ABSTRACT:  
In the 1990s Andreoni's seminal work explained motivations for individual's altruistic preferences. His impure altruistic model disentangled pure altruism (utility is gained from the final public good) and warm glow (utility is gained from the individual contribution, per se). He provided empirical evidence refuting the result that any tax or subsidy introduced by the state would completely crowd out public transfers. Bolton & Katok (1998) and Konow (2006) followed up on Andreoni's work and conducted lab experiments to study the direct tax effect on individual transfers. Bolton & Katok (1995,1998) implemented a between subject design to study the direct tax effect on private giving. They explained incomplete crowding out by the importance of 'moral suasion' whereby a larger government contribution could heighten the donor's sense of obligation to give to that organization. Konow (2006) further explained the urge to give (despite a tax or a subsidy) by a socially desirable threshold. He defined this 'moral suasion' as any social norm which the individual desires to meet so that they can maintain their image in the society. Therefore individuals will continue to give until this normative threshold is met, irrespective of a state led tax or subsidy. Taking a step further, the study by Eckel & Grossman (2005), followed by Crumpler & Grossman (2008) attempted to disentangle warm glow giving. Apriori the decision to donate, the participants were informed that part of their endowment was already transferred to the third party. They found pure altruists reduced their donations after obtaining this information but warm glow givers continued to donate despite this tax. In the similar lines, our study attempts to understand the conditions under which individuals have either warm glow or pure altruistic motivations when they decide to donate. We particularly investigate how social norms governed by the identity of the recipient will affect an individual's contribution to a public good. Although the study of identities and how they impact decision making has been widely discussed in other disciplines, it is only a recent point of discussion among economists. The seminal work by Akerlof & Kranton in 2002 incorporates different individual identities in the utility function to explain people's behavior, which is largely contradictory to a prediction based on the neoclassical notion of utility maximization. While some studies use induced identities (Kranton, Pease & Sanders, 2012; Mills, 2014; Corr, Heap et al, 2015) others make pre-existing identities salient (Chai et al,2009; Chakravartthy et al, 2015; Hoff & Pandey,2006; Arifovic, Ludwig & Wright, 2012; Landmann,2016). The results in these studies reveal extensive support of an ingroup bias in individual decision making. With particular focus on prosocial giving, studies observe that introduction of identities would encourage more warm glow giving but only towards ones ingroup - either because the individual is keen on improving his self-image amongst his group members (Swain, 1993; Bernhard, Fehr & Fischbacher, 2006; Chen & Li, 2009; Goette, Huffman & Meier, 2006) or there is an
expectation of indirect reciprocity from people in ones in-group (Landa & Duell, 2014). Our study contributes to this literature in two ways: first we observe the trajectory of both warm glow giving and pure altruism among children from age 9 to 15 years old. We expect to see an increase in overall altruistic giving and particularly warm glow giving as the children are older. Our second question attempts to observe whether the religious identity of the recipient results in heterogeneous altruistic preferences among children and how these preferences might evolve with age. A large scale field experiment (n=2500) was conducted among children in India to study if there is a change in altruistic preferences when the identity of the recipient changes. The research design required each child to complete an education related survey. As a reward for completing the survey, we gave the children a fixed prize (in the form of school materials). We then asked the children if they would like to give a part of their prize to child beneficiaries of a NGO. While providing information on the NGO, we included pictures of the recipient. In order to make the identity salient we changed the picture of the potential recipients with each picture denoting a different religious group; Hindus and Muslims, keeping the deservingness constant. Our research design helps understand children's altruistic preferences and how it might differ when the identity of the recipient changes from an in-group member (same religious group) to an out-group member. Based on theories of Social Comparison and Social Identity (Turner, 1982; Tajfel, 1986), we propose that the children will have stronger pure altruistic motives when the recipients are from an out-group and there will be stronger warm glow motivations when the transfers are made to in-group recipients. We attempt to show how a social norm of supporting the in-group recipients and thereby retaining a positive social image among their social networks will emerge among the children. A second dimension of the study considers the age as a factor to determine such heterogeneous altruistic preferences of the children. While studies have shown how altruistic preferences increase with age, we attempt to observe the evolution of both warm glow and pure altruism among children of different age groups. Our motivation for this paper is also two-fold; firstly in the light of current events of extreme religious hatred in India, our study attempts to understand if such identity based discrimination stems from a younger age. By using a representative sample of school children of different age groups, we can identify and attenuate such discriminatory behavior, if any, at the school level. A second motivation of this paper is to extrapolate this evidence on identity based exclusion and re-examine the increasing popularity of decentralized forms of governance across the world. While decentralization is an attempt to reach the grass roots, we provide some evidence on whether identity of the recipient could moderate the equitable distribution of public goods. Given the extensive autonomy that local governments have, a predilection towards favoring the people of the party in power might lead to extensive exclusion of other minority groups. The evidence from our research study reveals how religious animosity towards the out-group might not necessarily stem from among children until 15 years of age. While the children do not differentiate their transfers based on identity of the recipient, we observe a significant decrease in warm glow giving with age which is particularly driven by the donation decisions of Muslim children. While Hindu children show an increase in pure altruistic motives towards the out-group (as they grow older) and show a decrease in warm glow giving towards their out-group i.e Muslim children, these results are not significant. Muslim children on the other hand show a consistent increase in pure altruistic motives of giving as they grow older irrespective of the identity of the recipient constant.

Author(s): Pooja Balasubramanian, Daniel Celis, Marcela Ibanez


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Virtual Reality and Charitable Giving - An Experimental Study

Ozgur Gurerk
RWTH Aachen University

ABSTRACT:

Currently, United Nations and other major non-profit organizations use virtual reality (VR) technology to inform the public about their causes, and for fundraising. It is assumed that 360 degree videos experienced with VR devices create empathy and understanding, and may increase donations. In this study, we test this new technique in a controlled lab experiment. Participants first perform a real effort task to earn money. Next, using a head mounted display, subjects experience a 360 degree video of the destroyed city of Aleppo. Finally, the participants are given the possibility to donate to a local organization helping refugees. We find, compared to a written ask treatment, VR increases both the percentage of givers (by 15% points) and the amount of donations (40% more). A control treatment showing the same
From foe to friend and back again: The temporal dynamics of intra-party bias in the 2016 U.S. Presidential Election

Antonio Alonso Arechar
Yale University

ABSTRACT:

Political identification is the basis of enduring conflict, suggesting that political attitudes are difficult to change. We show that political identities engaged in the 2016 U.S. Presidential Election underwent striking modification in response to salient political events. Specifically, we show that the shift from party primaries (characterized by intra-party conflict) to the general election (characterized by inter-party conflict) can cause animosities between supporters of rival primary candidates to attenuate as superordinate goals (defeat rival party) and identities (Democrat/Republican) solidify. We investigate these temporal dynamics in detail by collecting data at regular intervals from mid-June to early September 2016 and then again from mid-October through the general election in early November, 2016, total N = 3,958. We operationalize identification via prosocial giving between supporters of competing primary candidates recruited from Amazon Mechanical Turk. Initially, Democrats and Republicans showed intra-party bias, sharing more money with supporters of their favored primary candidate. Thereafter, party dynamics differed dramatically. In-group bias among Democrats remained high until the Democratic National Convention, disappeared shortly thereafter, and then returned during the final stage of the election. Bias among Republicans was generally high until the final stage of the election. Furthermore, giving decisions were correlated with reported voting intentions, and potentially offered additional insight beyond polling: the late resurgence of bias among Democrats was not reflected in reported voting intentions, but may have presaged the surprise loss of the Democratic candidate. We emphasize discontinuity and contingency of changing identities, and the potential utility of identity for predicting political outcomes.

Author(s): Yarrow Dunham, Antonio A. Arechar, David G. Rand

Topic: Public Choice: Voting and Rent Seeking, Social Behavior: Group Behavior

Good News, Bad News and Giving: Impact of Recipient Characteristics

philip grossman
Monash University

ABSTRACT:

We investigate if information about recipients affects if donors give and how they give (cash or in kind). Subjects decide how to allocate their endowments among unemployed recipients of different characteristics. Subjects are provided information regarding three recipient characteristics (presented with alcohol/drug issues, taking courses to improve job prospects, and disabled) for each of their exclusive 27 recipients (one selected at random to actualized). Information is either Yes, No, or No Information. In the main study on which we focus our data analysis, donations were given in cash (the Cash treatment). We also conducted two further robustness treatments. In one treatment, instead of cash, donations were given in kind in the form of credits which could be used to purchase food and daily necessities from an onsite nonprofit marketplace operated by the Salvation Army's Melbourne 614 Project (the Credit treatment). In another
Social Distance and inter-charity competition

Johannes Lohse
University of Birmingham

ABSTRACT:
The rapidly evolving science of philanthropy has substantially enlarged the evidence base for the most popular fundraising methods, such as matching techniques for the voluntary provision of (impure) public goods. The more recent examples include the technique of using community affiliation to decrease the social distance between the donor and the recipient organization to mobilize giving to a (local) public good. The impact of charitable organizations differentiating themselves by adopting such techniques on aggregate public goods provision levels is unclear, however. We compare, in a field experimental setting with 402 subjects, aggregate and charity-specific donations to competing nonprofits which supply almost perfectly substitutable public goods. We compare a baseline without differentiation to one with charities differentiated by matching grants, one with differentiation by social distance, and one with differentiation in both dimensions. Differentiation by social distance leaves aggregate giving unchanged by crowding out giving to the socially distant charity. Differentiation by matching grants increases aggregate giving, but only marginally. Aggregate giving is highest in a world of double differentiation in which nonprofits differ in social distance and donations to the socially close nonprofit are matched.

Author(s): Carlo Gallier, Timo Goeschl, Martin Kesternich, Johannes Lohse, Christiane Reif, Daniel Roemer

Need, equity and equality - testing the principledness of laypeople

Arne Robert Weiss
University of Oldenburg

ABSTRACT:
In our vignette experiment, we measure how laypeople, when hypothetically distributing between two persons, weigh need versus equity and equality, arguably the three central principles of distributive justice. Specifically, we are interested in three forms of principledness in subjects' choices: principledness concerning the consequences of following either principle, the perspective subjects take and the resources available for distribution. We find that choices are not systematically affected by the outcome consequences (implying that subjects care little about equality), nor surprisingly by the perspective subjects are taking. Available resources matter, but in unexpected ways. The need principle is strongest (and stronger than the equity principle) when both persons' needs can be fulfilled exactly and is markedly reduced for severe oversupply and undersupply. This finding suggests that the relative weight of one principle over another may not only be malleable to context, but the interaction itself may be more complicated than the rivalry assumed in the literature: equity claims may sometimes increase a claim for need fulfillment.

Author(s): Arne R. Weiss, Stefan Traub, Mark Siebel
Quality certifications for nonprofits, charitable giving, and donor's trust: experimental evidence

Julian Harke
WZB

ABSTRACT:
In an experiment, we test the impact of quality certificates on donations to a charity. When presented with a quality certificate, participants chose higher donations by approximately 10%. This effect is significant for donations out of prize money and actual own money donations, and not significant but positive for own money intended donations. Moreover, this effect persists over time. We also find a negative but not significant effect of information about certificate fees. We find that the certificate increases trust in the nonprofit organization. There is some evidence pointing to the causal role of trust for donation probability.

Author(s): Maja Adena, Jeyhun Alizade, Frauke Bohner, Julian Harke and Fabio Mesters

How Does Competition Affect People Economically and Emotionally?

Jaesun Lee
Tongji University

ABSTRACT:
Competition is fostered in many domains to improve performance, but its psychological impacts on those involved -- and thus the effects on their overall utility and well-being -- have not yet received much attention in the literature. This paper investigates the effect of competitive environments on effort provision and mood by conducting a lab experiment and on that basis proposing a simple model that incorporates mood in the utility function. The paper also explores how past experiences affect people's preferences for competitive payment schemes. The results show that people exert greater effort when they work under competitive payment schemes such as piece-rate and rank-order tournament payments than they do under fixed payments. In contrast, these competitive payment schemes, along with rank feedback, make people feel worse. In particular, people with low ranks suffer to a greater extent as the working environment becomes more competitive. The findings provide evidence that competitive environments may be detrimental to some people in the left tail of the performance distribution. Moreover, the paper finds that expected earnings play a more important role than mood in people's preferences for incentive schemes. The study contributes to the literature by introducing the psychological impact of competitive working environments and a potential role of mood in the discussion of preferences.

Author(s): Jaesun Lee

Does Empathy Pay?

Linda Kamas
ABSTRACT:
Empathy has been promoted as an important personality characteristic that can lead to successful job performance and positive labor market outcomes. Empathic people may work well with others, building and maintaining relationships in diverse organizations. Empathy also has been considered a key component of effective managerial leadership. This suggests that empathy may 'pay' by leading to higher earnings. However, greater empathy may also lead people to choose careers that are less remunerative and more socially oriented, such as in the caring fields or in non-profit sectors. This study examines whether empathy, as measured by the Interpersonal Reactivity Index questionnaire (IRI), is correlated with post-graduate salaries. We examine the roles of gender, major, and sector of employment in explaining the impact of empathy on earnings. Our findings are based on six years of annual surveys of students who graduated between 2011 and 2013 from Haverford College, Mills College, Santa Clara University, and Wellesley College.

Author(s): Linda Kamas and Anne Preston

Back to session: Cognition and Emotions

The influence of compassion on decisions involving intertemporal choice

Diya Abraham
Masaryk University

ABSTRACT:
Theory predicts that compassion, as a distinct prosocial affective state, can be used as a tool to reduce the level of economic impatience, just as gratitude, a similar prosocial emotion was shown to do previously. This paper explores, through an experiment, the role of compassion in intertemporal choice, using sadness as a comparison condition. The results of the experiment reveal that not only does induced compassion fail to significantly reduce the level of economic impatience as compared to the neutral state but also tends to increase economic impatience in certain cases. The findings of our research point to two conclusions, the first being that pure compassion may not exist as a distinct prosocial emotion but may instead be a blend of sadness and another (possibly prosocial) emotion such as love. Second, in specific cases, typically involving the suffering of a family member or close friend and / or a perceived inability to reduce the suffering witnessed, compassion devolves into empathic distress which has the effect of increasing economic impatience compared to the neutral state.

Author(s): Diya Elizabeth Abraham, Martin Machay

Topic: Psychology and Biology: Emotions, Decision Theory: Other
Back to session: Cognition and Emotions

Care and ander motives in social dilemmas

Christoph Schutt
IfW Kiel

ABSTRACT:
Maximizing one's selfish benefits is the only motive of action depicted in neoclassical economics; while temporally-stable social preferences are depicted in behavioral economics. However, a vast literature in psychology suggests that individuals have access to multiple motives with distinct underlying objectives and their activation is context-dependent. Building on this insight, we study how different motives have different behavioral implications in social dilemmas. In particular, we experimentally induce two antagonistic motives, care and anger, in one player towards another and then observe their interactions. We find that the care motive leads to a more pro-social objective function and hence more cooperation.
Lying for Others: The impact of agency on misreporting in an economic laboratory experiment

Wolfgang Luhan
University of Portsmouth

ABSTRACT:

We extend two streams of literature, the study of misreporting and lying aversion and the study of agency (acting on behalf of others). In a situation where misreporting of private information (lying) is beneficial, the standard economic theory assumes that behaviour is driven by the trade-off between potential gains and the expected fines associated with detection (e.g., Becker, 1968 on crime, Allingham and Sandmo, 1972, on tax evasion). Without possible detection, people are expected to lie and maximise payoffs. A growing literature in behavioural economics (and psychology) shows that people in general do not lie to the full extent even when detection is impossible, which is partly explained with 'lying aversion' (e.g., Benabou and Tirole, 2002; Mazar et al., 2008). When deciding for others, people have been found to behave more conservatively and take fewer risks due to a feeling of accountability (Charness and Jackson, 2009); other studies have found them to act as if there were no consequences to their actions (e.g., Harrison, 2006). The possible behavioural differences between reporting for oneself or for others are manifold. As benefits for others are irrelevant in economic standard theory, lying aversion would predict truthful reporting. Responsibility might lead to more misreporting in order to maximise the beneficiaries' payoff, which might be fostered by accountability. As many economically relevant situations involve both, a demand for revealing private information and some form agency (e.g., tax counselling, financial investments), we need to establish the motivational factors and their impact such situations. We develop a theoretical framework for this decision context, identifying motivational factors and expected behavioural patterns. Using laboratory experiment we test the emerging hypothesis, discriminate behavioural types and identify the models with the highest predictive power. We design an experiment following the prevalent 'die-under-the-cup' method (Fischbacher and Follmi-Heusi, 2014) where participants secretly roll a die and are paid according to the (no-verifiable) self-reported outcome. In a between-subjects design, subjects either report for themselves or for an anonymous third party without any payoff consequences for them. Our results for subjects reporting for themselves confirm the results from previous studies with very similar levels of misreporting and lying aversion. When reporting for others we not only find significantly higher levels of lying aversion but apparent over reporting of the outcome '2'. We show that this result is driven by two factors, inequality aversion and asymmetrically shaped lying aversion.

Getting a Yes. An Experiment on the Power of Asking

Lisa Bruttel
University of Potsdam

ABSTRACT:

This paper studies how the request for a favor has to be devised in order to maximize its chance of success. We present results from a mini-dictator game laboratory experiment in which giving entails an efficiency gain. Before the dictator decides, the recipient can send a free-form text message to the dictator. We find that the content of a message and its
form do matter in the decision to give. Putting effort into the message by writing in a humorous and creative way pays off. We argue that this can be interpreted in terms of reciprocity. Mentioning reasons why the money is needed increases the generosity of dictators as well. Additionally, we find differences in the behavior of male and female dictators. Only men react positively to efficiency arguments, while only women react to messages that emphasize the specific power and responsibility of the dictator.

Author(s): Lisa Bruttel, Florian Stolley, Verena Utikal
Topic: Social Behavior: Communication, Games: Bargaining
Back to session: Communication and Cooperation (SHORT)

Framing in a Dictator Game - Gender Differences in the Response to Decision Power and Responsibility

Florian Stolley
University of Potsdam

ABSTRACT:

This paper studies the effects of two different frames on decisions in a dictator game. Before making their decision on how much to allocate to a receiver, dictators see a short text on the decision sheet which varies depending on the treatment. The text is either a sentence about their decision power and freedom of choice or a sentence about their specific responsibility for the receiver. Including a control treatment without such a text, three treatments are conducted with a total of 207 dictators. Our results show a different reaction to these texts depending on dictators' gender. We find that only men react positively to a text which emphasizes their specific responsibility for the receiver while only women react positively to a text which emphasizes their decision power and freedom of choice.

Author(s): Florian Stolley, Lisa Bruttel
Topic: Social Behavior: Communication, Games: Bargaining
Back to session: Communication and Cooperation (SHORT)

Communication and Hidden Action

Jan Schmitz
ETH Zurich

ABSTRACT:

Recent findings in behavioral economics document that communication improves efficiency when strategic interaction is plagued by contractual incompleteness. However, little is known about the effect of communication when actors can hide their opportunistic behavior behind uncertainty in the economic environment. We investigate the effect of communication under economic uncertainty by studying a stochastic trust game framed in a credit context. In this game the investment income of borrowers (second-mover) and thus their ability to repay the lenders (first-mover) is random. We implement a treatment in which the borrower can send text messages to the lender and compare it to a treatment without communication. We benchmark our findings against the effect of communication in two similar trust games in which i.) borrower investment income is deterministic and ii.) borrower investment income is stochastic but borrower behavior is revealed to the paired lender. When opportunistic behavior is revealed to the lender communication has a significant positive effect on credit volumes and repayment rates even when the economic environment is risky. In addition, the impossibility to hide opportunist behavior behind economic uncertainty increases the average payoffs for both lenders and borrowers. By contrast, when borrowers can hide strategic defaults behind the surrounding uncertainty in the stochastic trust game communication does not improve repayment rates or payoffs. When the borrowers income and ability to repay is stochastic and opportunistic behavior is private information, they are more likely to renege on promises to repay than when their income is deterministic.
The Selfish 'I': The Effects of Pronoun Use on Social Preferences

Tai-Sen He
Nanyang Technological University

ABSTRACT:

Do the languages we use influence our social decision-making? Using English-Chinese bilinguals in Singapore as our subjects, we manipulate two linguistic dimensions to examine their effects on one's social preference in a dictator-style game. First, we examine the effect of (instructional) language. In the English (Chinese) treatment, all decision items were written and verbalized in English (Chinese). Then, within the Chinese treatment, we further manipulate the use of personal pronoun by dropping the 'I', which is grammatically correct in Chinese as a pro-drop language, forming the 'Chinese_No I' treatment. We report several findings from our experiment. Firstly, we observed no cultural priming effect. There is no difference in the measures of social preference between the English and Chinese treatments. Secondly, we document a strong 'I' effect. When subjects are repetitively exposed to the pronoun 'I,' they appeared to be more selfish by allocating more resources to himself at the cost of the other's monetary payoff. Interestingly, we find that the 'I' effect is more pronounced among those who are from a Chinese-oriented family than their English-oriented counterparts.

To listen or not to listen. An experimental study of optional communication

Jordi Brandts

ABSTRACT:

In a one-shot two-person lab experiment we study how behavior is affected by whether player 1 reads the message that player 2 has sent him/her. The issue is relevant in organizations, bargaining and in public decision-making. Our work is motivated by our general interest in how free-form communication affects economic behavior. We have data from three treatments: Optional Communication (N=220), Fixed Communication (N=110) and No Communication (N=110), with the two latter treatments acting as controls. The experiment has two stages. In stage 1 of Optional Communication, player 1 has to choose between two payoff distributions affecting both players 1 and 2. Before player 1 makes the decision, player 2 can send a free-form message to player 1. Before player 1 makes the decision he can choose to read the message or not. In stage 2, player 2 can reward or punish player 1. We study behavior in two different tasks, which differ in the two payoff distributions that are possible. In task 1 (task 2) player 1 has to choose between the following payoff distributions: A ($24, $6) and B ($18, $12) (A ($24, $6) B ($4, $26)). In task 1 player's 1 decision can be easily influenced by player 2's message, whereas in task 2 it seems less likely that player 1 can be influenced. The experiments were run at the MONLEE lab at Monash using z-tree. The results show that player 2's behavior is consistent with reacting differently to kind and unkind treatment and not by whether he/she is listened to or not. Player 1's behavior is consistent with curiosity or respect and not with the exploitation of moral wiggle room or self-image concerns. We relate our results to several models of social preferences.
A Rationale for Unanimity in Committees

Yves Breitmoser
Humboldt University Berlin

ABSTRACT:

Existing theoretical and experimental studies have established that unanimity is a poor decision rule for promoting information aggregation. Despite this, unanimity is frequently used in committees making decisions on behalf of society. This paper shows that when committee members are exposed to 'idiosyncratic' payoffs that condition on their individual vote, unanimity can facilitate truthful communication and optimal information aggregation. Theoretically, we show that since agents' votes are not always pivotal, majority rule suffers from a free-rider problem. Unanimity mitigates free-riding since responsibility for the committee's decision is equally distributed across all agents. We test our predictions in a controlled laboratory experiment. As predicted, if unanimity is required, subjects are more truthful, respond more to others' messages, and are ultimately more likely to make the optimal decision. Idiosyncratic payoffs such as a moral bias thus present a rationale for the widespread use of unanimous voting.

Author(s): Yves Breitmoser, Justin Valasek
Topic: Social Behavior: Communication, Social Behavior: Lying and Cheating
Back to session: Communication and Cooperation (SHORT)

Reputation and Advice: Political Correctness in the Laboratory

Brit Grosskopf
University of Exeter

ABSTRACT:

We experimentally test the bad reputation predictions of Morris (2001). An informed advisor can give advice to an uninformed decision maker in a repeated cheap talk game. The actions of the decision maker determine the payoffs to both agents. We vary the incentive of the advisor to truthfully reveal valuable information by varying the importance of future payoffs to both agents. We find that advisors are concerned about their reputation. However, they are not as "politically correct" as suggested by theory. Results from complementary lab-in-the-field experiments show that chess and poker players behave similarly.

Author(s): Brit Grosskopf, Graeme Pearce and Rajiv Sarin
Topic: Games: Repeated Games, Games: Information
Back to session: Communication and Cooperation (SHORT)

Sequentiality increases cooperation in repeated prisoner's dilemmas

Riccardo Ghidoni
Tilburg University

ABSTRACT:

Sequentiality of moves in an infinitely repeated prisoner's dilemma does not change the range of possible equilibrium outcomes as compared to simultaneous decision-making. The nature of the interaction is different, however, given that the second mover in a sequential-move game does not face strategic uncertainty in the stage game. We study in an experiment whether sequentiality has an effect on cooperation rates. We find that with

Author(s): Riccardo Ghidoni and Sigrid Suetens
Digital communication and trust

Nobuyuki Hanaki
University of Nice Sophia Antipolis

ABSTRACT:

Digital technologies have become ubiquitous. Many sorts of interactions (including economic, organizational, and personal) have shifted to the digital space. Yet, little is known on effects these new technologies have on socio-economic outcomes. Herein, we study the effects of digital communication on trust. In a series of incentivized lab experiments, we implement the Charness and Dufwenberg (2006) hidden action game and allow for several modes of pre-play communication: face-to-face, as well as different forms of computer-assisted interaction (video, audio, chat). Our experimental design allows us to control for various individual characteristics (risk preferences, other-regarding preferences, cognitive skills, emotional intelligence). We also exogenize the content of communication across the digital communication treatments: communication in the face-to-face treatment is recorded and then re-used in digital communication treatments. Thus, our study provides a causal investigation of the effects of digitization of human communication on trust in economic interactions.

Author(s): Zakaria Babutsidze, Nobuyuki Hanaki, Adam Zylbersztejn

Public Discourse and Pro-Social Market Behavior

Vanessa Valero
University of Zurich

ABSTRACT:

This paper studies the impact of public discourse on socially responsible market behavior. We extend the laboratory experimental market paradigm developed in Bartling et al. (2015), in which firms and consumers exchange products that differ in their social impact with some products imposing an externality on third parties and other products yielding no externality but costing more to produce. Prior to interacting in the market, we provide market actors and impacted third parties with the opportunity to discuss 'socially appropriate' market behavior via a public forum. We find that such public discourse substantially increases market social responsibility in two distinct populations, in Switzerland and China, that differ in their baseline tendencies toward pro-social market behavior. We also vary characteristics of the public discourse institution, to provide insights into the mechanisms driving the impact of public discourse on pro-social market behaviors. In one treatment variation, we manipulate wither subjects engage in discourse either behind or in front of a 'veil of ignorance' regarding their roles in the market interaction. In another manipulation, we vary whether affected third parties are included in or excluded from the discourse.

Author(s): Bjoern Bartling, Vanessa Valero, Roberto A. Weber and Lan Yao

Communication and helping behavior: An experimental study

Marianne Stephanides
Communication options in social exchange may support or strategically crowd out mutual helping and beneficence. In an experimental environment where one person can help the other (by reducing the other's risk of losing money) and the other person can subsequently reward or punish such helping behavior, we study the effect of the option for the helper to send a one-sided message (e.g. 'I am sorry', 'You are welcome') after the help-affected risky outcome has been realized. In a two-factorial design, we vary whether the helper can send a message or not, and whether the recipient can observe the actual helping behavior or just the help-affected risky outcome. Our results suggest that participants use messages strategically, in that less is invested in helping behavior when there is an option to send a message afterwards. Messages showed a positive effect on reward in most but not all experimental conditions. A content analysis of messages reveals that the majority of participants use the message option to emphasize their helping act or to talk about being sorry/happy. These messaging-strategies are not effective in all situations.

Author(s): Marianne Stephanides
Topic: Social Behavior: Communication, Games: Information
Back to session: Communication and Information

Moral wiggle room reverted: Information avoidance is myopic
Alexander Nesterov
Higher School of Economics

We use a range of dictator game experiments to investigate why people avoid information. Dictators in our experiment know their own payoffs and can choose whether to learn the payoffs of the recipient. We vary whether dictators can learn the recipient's payoff before or after they are presented with their self-interested action. We find that dictators are more likely to avoid information when they do not yet know their self-interested action, and consequently act more selfishly in this case. These results go against two popular explanations of information avoidance: self-image and default effects. We study and test alternative explanations such as wishful thinking, cognitive dissonance, and attention and find support for the latter.

Author(s): Homayoon Moradi, Nesterov
Topic: Social Behavior: Other-regarding Preferences, Decision Theory: Bounded Rationality
Link: https://drive.google.com/file/d/0B-pBII2EE4fb3htZl9wVmZIMWc/view?usp=sharing
Back to session: Communication and Information

Partisan Influence in Conflicts
Gerald Eisenkopf
University of Konstanz

The paper studies the impact of partisan lobbyists in rent-seeking contests. In the experiment lobbyists can give recommendations to their contestants. The results show that recommendations do not increase contest intensity even though most contestants follow them rather closely. However, the lobbyists effectively undermine nonbinding agreements that aim at reducing contest expenditure between the conflict parties. In an additional treatment, lobbyists could also provide financial support to 'their'contestant but the qualitative results do not change in this context.

Author(s): Gerald Eisenkopf
Conflict and Migration: Mobility in Group Contests

Henrik Zaunbrecher
Maastricht University

ABSTRACT:
Group contests have been used to study conflict between countries, R&D competitions, sports competition and lobbying. Usually, it is assumed that individuals belong to one group and that this group membership will remain unchanged. However, in practice, soldiers can defect, employees switch employers and athletes switch teams. We introduce intergroup mobility to a group contest and test how this affects contest contributions in a lab experiment. We find that endogenous (voluntary) migration increases contest contributions, whereas exogenous migration (displacement) has a negative but insignificant effect relative to a baseline without intergroup mobility. In the endogenous migration treatment, the decision to leave the own group is mainly driven by bad prospects of winning.

Author(s): Henrik W. Zaunbrecher, Florian Heine, Arno Riedl
Topic: Games: Contests, Social Behavior: Communication
Back to session: Conflicts

Experiments on Generalized Colonel Blotto Games

Dan Kovenock
Chapman University

ABSTRACT:
The Colonel Blotto game is a classic framework for modeling problems of strategic resource allocation. Players simultaneously allocate their resources across multiple distinct battlefields with the objective of winning as many battlefields as possible. Drawing on recent theoretical advances, we use a laboratory experiment to examine behavior under novel generalizations of this game. In addition to allowing players' budgets to vary, we allow battlefield valuations to differ both from one battlefield to the next and across players. In Blotto games with greater asymmetry across players, advantaged players overemphasize high value battlefields, while their opponents tend to behave in line with theoretical predictions. In more symmetric games, both players overemphasize high value battlefields. Players who are especially weak in a set of battlefields frequently adopt a strategy of targeting only a proper subset of those battlefields, while forfeiting the others.

Author(s): Alan Gelder, Dan Kovenock, and Brian Roberson
Topic: Games: Contests, Social Behavior: Group Behavior
Back to session: Conflicts

The Supply Side Determinants of Territory and Conflict

Jordan Adamson
Chapman University

ABSTRACT:
What determines the geographic extent of political territory? We create a novel model that microfounds and extends
Boulding’s "Loss of Strength Gradient" to predict the extensive and intensive margins for conflict at multiple locations. The model shows how both economies of scale in the production of violence and costs associated with the projection of violence at a distance affect the geographic distribution of peace and war. We test and probe the boundaries of this model in a 2x2 experimental design, varying whether there are high or low fixed costs of conflict entry and whether subjects have complete information about the conflict success function (as in the model) or operate under Knightian uncertainty (as in typical conflicts). {Experimental results forthcoming}.

Author(s): Jordan Adamson, Erik Kimbrough
Topic: Games: Contests, N/A
Back to session: Conflicts

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**Does a short-term increase in incentives boost performance?**

**Thomas Giebe**  
**Linnaeus University, Sweden**

**ABSTRACT:**

If agents are exposed to continual competitive pressure, how does a short-term variation of the severity of the competition affect agents' performance? In a real-effort laboratory experiment, we study a one-time increase in incentives in a sequence of equally incentivized contests. Our results suggest that a short-term increase in incentives induces a behavioral response but does not boost total performance.

Author(s): Vera Angelova, Thomas Giebe, Radosveta Ivanova-Stenzel  
Topic: Applied Economics: Labor Market, Games: Contests  

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**Tournaments with fatigue and recovery: The effect of a one-time increase in incentives**

**Vera Angelova**  
**TU Berlin**

**ABSTRACT:**

We extend the well-known Lazear-Rosen rank-order tournament model to a dynamic setting with fatigue and recovery. We provide theoretical predictions of how effort allocation over time responds to one-time changes in incentives. Taking into account fatigue and recovery effects, the model predicts higher effort in times of higher incentives, but also strategic resting before an increase in incentives, and slacking after incentives are reduced. We test the predictions in a laboratory experiment. Regarding fatigue and recovery effects, the experimental results are consistent with comparative statics predictions. Contrary to the theoretical prediction, however, total effort does not increase with a one-time increase in incentives.

Author(s): Vera Angelova, Thomas Giebe, Radosveta Ivanova-Stenzel  
Topic: Applied Economics: Labor Market, Games: Contests  
Back to session: Contests (SHORT)

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**Not wilting under pressure: using counter-biasing to prevent big mistakes at high stakes**

**Jeffrey Carpenter**  
**Middlebury College**
Recent studies suggest that, contrary to standard theory, performance may not rise monotonically with financial incentives. Instead, the stakes can sometimes loom larger than anticipated for some agents causing them to 'choke.' We test an intervention designed to help 'chokers' by reducing the perceived stakes and find that the intervention has a large effect in the targeted population and has no ill effect on the rest of the agents. Because our intervention is designed to use one behavioral bias (present bias) to counteract the effect of another (chocking at high stakes), it demonstrates the general potential of 'counter-biasing' as an effective policy tool.

**Author(s):** Jeffrey Carpenter, Kevin Benscheidt  
**Topic:** Applied Economics: Labor Market, N/A  
**Back to session:** Contests (SHORT)

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**Policy capture by special interests in democracies: The role of revolving doors and post-office employment**

Ernesto Reuben  
New York University Abu Dhabi

**ABSTRACT:**

We experimentally study the role of the revolving door and post-office employment in policy capture by special interests. In our rent diversion game, two politicians compete in a majoritarian election by announcing binding tax policies and special interests can attempt to influence them through unconditional transfers after the election. We observe that (i) the possibility of transfers leads to some policy capture by the special interests; (ii) policy capture increases when special interests and politicians interact repeatedly via the revolving door and, to a lesser extent, when special interests can build a reputation of providing post-office employment to exiting politicians who committed to low taxes while in office; (iii) successful policy capture only arises if proposing low tax rates, in particular when politicians coordinate on doing so, is sufficiently rewarded by the special interests to compensate for the risk of proposing an unpopular policy.

**Author(s):** Jens Großer, Aaron Kamm, Ernesto Reuben  
**Topic:** Applied Economics: Labor Market, Social Behavior: Communication  
**Back to session:** Contests (SHORT)

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**State-contingent Risk-taking in Dynamic Contests**

Alexander Usvitskiy  
Florida State University

**ABSTRACT:**

We investigate a process of decision-making in a multi-period contest with two players, in which competing players simultaneously choose among actions with different levels of risk every period. Strategic risk-taking is analyzed in isolation from effort choices, and according to expected utility theory risk preferences are irrelevant. We derive a general closed-form solution of the dynamic game for any number of periods. The equilibrium exhibits an independence of intermediate alternatives property, whereby a leading player should choose the lowest level of risk, a trailing player should choose the highest level of risk, and all elements of the action space with intermediate levels of risk are irrelevant. We design a laboratory experiment to test various comparative statics of the model and explore behavioral deviations. We find that comparative statics are consistent with theory. One substantial deviation from the model predictions is that irrelevant alternatives are being frequently chosen, which does not actually affect the overall risk-taking levels.
On the lack of learning in winner-take-all industries - An experiment

Francesco Fallucchi
Luxembourg Institute of Socio-Economic Research

ABSTRACT:
We analyze participants' investment behavior and learning under different contest settings. We employ a 2x2 design that varies by market size (three or five contestants) and by market structure (share contest or winner-take-all contest). In line with previous findings, we show that excess of expenditures in share contests are rapidly converging to their predicted equilibria whereas pervasive overdissipation remains in winner-take-all settings. A significantly lower and stagnant fraction of myopic best-response plays combined with a significantly higher rate of non-participation in the winner-take-all contests advocates that the difference in expenditures between both contest types are driven by differences in learning paths. A learning parameter estimation using the experience weighted attraction model (EWA) shows that winner-take-all participants rely significantly more on own realized payoffs while contestants in share contests use more adaptive learning techniques. These results appear to be robust with respect to market size. We hypothesize that the strong reliance on experiential learning in winner-take-all contests renders it difficult to form myopic best-responses due to the random nature of the contest outcomes. Our setting and findings mimic environments with high outcome uncertainty, such as R&D endeavors in the pharmaceutical industry, where it is harder to infer optimal investment choices based on past experience.

Team Contests, Sabotage and Helping

Regine Oexl
University of Innsbruck

ABSTRACT:
The project deals with the interaction of individuals in teams in a tournament environment. Team production is often vital for the success of an organization. Embedded in the concept of teamwork is often the assumption that teams are successful if each team member individually performs well on the task at hand. A management policy stemming from this perception is to hire the highest ability workers. A potentially more important, but sometimes overlooked factor, is the team's ability to induce members to work together. Working together implies helping each other and refraining from sabotage activities against other team members. That is, in addition to motivating individual effort, a successful team must also encourage teamwork. When competing for external and internal rewards, the two objectives might be in conflict. The goal of this project is to investigate which team composition in terms of ability of its members leads to the highest team output, when team members can help or sabotage each other and teams may be exogenously or endogenously composed. Heterogeneous and endogenously formed teams in contests have not been studied in environments where team members can help and/or sabotage each other. The outcomes of this project may help in addressing the question how to form a successful team.
Reformulating archetypal economic games with a generalisation of the Keynesian Beauty Contest game

Rosemarie Nagel
UPF, ICREA

ABSTRACT:
We reformulate seemingly unrelated models from both micro- and macroeconomics (public good games, ultimatum games, Bertrand, Cournot, auctions, asset markets, New-Keynesian models, General Equilibrium models with sentiments/animal spirits) with a generalisation of the Keynesian Beauty contest (BC). Observed behaviour in experiments of variations of BC games can largely be organised by the "level-k" model, structuring the strategy space through reference points and (limited) iterated best responses, in the initial periods and to some extent over time.

Author(s): Felix Mauersberger and Rosemarie Nagel
Topic: Games: Contests, Games: Coordination

Not all Group Members are created Equal

Enrique Fatas
University of East Anglia

ABSTRACT:
Group competition has been extensively studied when individuals are equal (groups are homogeneous) or when competition is symmetric (and groups are identically homogeneous or heterogeneous). In this paper, we experimentally investigate the implications of this general observation on the unfolding of symmetric and asymmetric inter-group conflicts between groups that are either homogeneous or heterogeneous in the ability of their members to contribute to the group. Our main finding is that, in contrast with the theoretical equilibrium predictions, conflict expenditures in contests involving heterogeneous groups are much higher than in contests involving only homogeneous groups leading to lower efficiency and higher inequality. This effect is particularly pronounced in asymmetric contests, where both homogeneous and heterogeneous groups increase their conflict expenditures. We show that one reason for these results is that asymmetry between groups changes the within-group dynamics, i.e., the way group members condition their conflict expenditures on those of their peers.

Author(s): Francesco Fallucchi, Enrique Fatas, Felix Koelle and Ori Weisel
Topic: Games: Contests, Social Behavior: Group Behavior

Information quality and regime change: Evidence from the lab

Ragnar Juelsrud
BI Norwegian Business School

ABSTRACT:
In this paper we experimentally test the effects of information quality on regime change in a global coordination game. The game features a payoff structure such that more dispersed private information reduces regime stability in equilibrium. We show that subjects in the lab do not play as predicted by the theory. Rather, more dispersed information makes subjects more cautious relative to what the theory predicts. We show that this finding is consistent with a global coordination game in which agents are boundedly rational. Specifically, we show that a model in which agents engage in
Inducing Effort in Groups: An Experimental Investigation of Forward Induction and Loss Aversion

Sudeep Ghosh
Hong Kong Polytechnic University

ABSTRACT:

Individual effort in group projects is an important aspect of institutional behavior in many organizations. The dynamics of group behavior are shaped by the mechanisms of group payoffs and the resultant characteristics of equilibrium outcomes. Typically, the two most commonly investigated institutions in the literature are: (i) minimum effort involving weak-link game scenarios characterized by multiple pareto-ranked Nash equilibria, where the group payoff is determined by the lowest (or median) level of individual effort or (ii) maximum effort involving volunteer games scenarios characterized by asymmetric pure strategy Nash equilibria, where group payoff is determined by the highest level of individual effort level. In our experiment design, we initially run treatments based on these two scenarios, in addition to introducing a baseline scenario: (iii) random effort, i.e. where the group payoff is determined by a randomly selected individual effort level from the group. As predicted by theory, in scenario (i) our experiments reveal the problem of coordination failure, especially when individual effort is costly and group sizes are large (though changes in these variables have no role in the theoretical outcomes). Therefore, most groups end up in low payoff equilibria in this scenario. In scenario (ii), again as predicted by theory, we observe frequent incidence of free-riding behavior such that though on average the group payoffs are higher, yet the average individual efforts are similar to those in the scenario (i). For scenario (iii) we find that if individual effort costs are low enough (specifically, lower than the inverse of group size) then irrespective of outcome, each individual has an incentive to deviate by choosing ever higher effort levels. Similarly, the reverse is true for the case where the individual effort costs are higher than the inverse of the group size. For all of these treatments we look at treatments both where all members of the groups have identical effort costs and also where they have different effort costs. Finally, we introduce the two treatments we were most interested in. First, we introduce outside options where players are offered fixed outside options if they choose not to take part in the group decision-making and also, a payment to play mechanism, where players have the option to be a part of the group but only if they make a pre-determined payment. We observe more coordination at higher effort levels in both of these treatments. Finally, in order to separate the possible confounding effects of forward induction or loss-avoidance on the higher effort levels, we design our final treatment involving endogenous choice, i.e. we allow subjects to select the group payoff mechanism of their choice between the three initial scenarios, i.e. minimum, maximum and random effort described above. The results from this treatment show the highest average choice of effort levels compared to all other treatments across all scenarios, signifying that players self-select group mechanisms according to their individual types and thus are able to achieve better coordination (supporting the notion of forward induction).

Racing towards a finishing line: Theory and experiment

Theodore Turocy
University of East Anglia

ABSTRACT:
We develop a parsimonious model of a two-person race to a fixed finishing line. The model is novel in that it rationalizes complex behaviors such as 'negative-split' strategies in road running or dynamic breakaways from the peloton in cycling as features emerging in Markov-perfect equilibrium. In a laboratory experiment, we find that both the qualitative and the quantitative predictions of the Markov-perfect equilibrium are largely borne out in terms of comparative statics, showing that subjects race strategically and predictably.

**Author(s):** Yves Breitmoser, Jonathan H. W. Tan, Theodore L. Turocy  
**Topic:** Games: Contests, N/A  
**Back to session:** Coordination

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**Adoption of a New Payment Method: Theory and Experimental Evidence**

Janet Jiang  
Bank of Canada

**ABSTRACT:**

We model the introduction of a new payment method, e.g., e-money, that competes with an existing payment method, e.g., cash. The new payment method involves relatively lower per-transaction costs for both buyers and sellers, but sellers must pay a fixed fee to accept the new payment method. As a result of the network effects, our model admits two symmetric pure strategy Nash equilibria. In one equilibrium, the new payment method is not adopted and all transactions continue to be carried out using the existing payment method. In the other equilibrium, the new payment method is adopted and completely replaces the existing payment method. The equilibrium involving only the new payment method is socially optimal as it minimizes total transaction costs. Using this model, we study the question of equilibrium selection by conducting a laboratory experiment. We find that, depending on the fixed fee charged for the adoption of the new payment method and on the choices made by participants on both sides of the market, either equilibrium can be selected. More precisely, a lower fixed fee for sellers favors very quick adoption of the new payment method by all participants, while for a sufficiently high fee, sellers gradually learn to refuse to accept the new payment method and transactions are largely conducted using the existing payment method. We also find that an evolutionary learning model captures the dynamics of the experimental data well.

**Author(s):** Jasmina Arofovic; John Duffy; Janet Hua Jiang  
**Topic:** Games: Coordination, Games: Networks  
**Back to session:** Coordination

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**Multilateral Bargaining with Costly Recognition: An Experiment**

Duk Gyoo Kim  
University of Mannheim

**ABSTRACT:**

We examine how the competition to obtain the right to propose affects the division of an economic surplus, and how the prospect of the division affects the intensity of the competition. Some experimental findings are consistent with the theoretical predictions: Subjects with higher outside-option value spend more to get the right to propose, and proposers, in general, form a minimum winning coalition to maximize the rent of being the proposer. The proposer's share is smaller than what theory predicts, which is consistent with the results of many previous bargaining studies. The intensity of the competition seems weaker than what theory predicts, but with taking into account the proposer's partial rent extraction, subjects over-invest to increase the chance to be the proposer, which is consistent with the results of many previous contest studies. Two important findings that theory hasn't answered are as follows: First, subjects invested the least when their outside option values are heterogeneous, and they publicly know who spent how much to increase the chance to be the proposer. Considering that the ex-ante expected social cost is mainly due to the intensity of the competition, a policymaker who wants to maximize the aggregate utility may design the institution for collective
decisions similar to the public heterogeneous treatment. Second, a member who invested more was more likely to be chosen as a coalition member. The subjects with less attractive outside option are still encouraged to invest, as they invest more they are more likely to be selected as a coalition member, even if they could not be the proposer.

Author(s): Duk Gyoo Kim, Sang-Hyun Kim
Topic: Games: Bargaining, Public Choice: Voting and Rent Seeking
Back to session: Coordination and Bargaining (SHORT)

Risk Dominance vs. Boundedly Rationality in Asymmetric Volunteer's Dilemma
Toshiji Kawagoe
Future University - Hakodate

ABSTRACT:
We have developed a generalized version of an asymmetric Volunteers' Dilemma (VOD) game where cost for volunteering is different among players. But the prediction by the mixed strategy contradicts with our intuition and the experimental findings. So, we further analyzed the game with risk dominance as well as two boundedly rational models, quantal response equilibrium (QRE) and level-k model. Our analyses show that risk dominance and QRE predict the same direction of plays in this game, but level-k model and inequality aversion do not.

Author(s): Toshiji Kawagoe, Taisuke Matsubae, Hirokazu Takizawa and Tetsuo Yamamori
Back to session: Coordination and Bargaining (SHORT)

Negative reciprocity in bribery game
Kei Tsutsui
University of Bath

ABSTRACT:
This research analyzes bribery behavior using a repeated corruption game in the laboratory. This study contributes in two ways. Firstly, we investigate if the amount of bribery is larger in a society where a person experiences both roles of bribe-giver and bribe-receiver. Secondly, we propose a new experimental design where the bribe-receiver and the bribe-giver negotiate on the amount of bribery to be transferred between them using an unstructured bargaining protocol. The results show that more bribery is paid when the bribe-receiver experienced the role of the bribe-giver in the previous round.

Author(s): Ajit Mishra and Kei Tsutsui
Topic: Games: Bargaining, Social Behavior: Other-regarding Preferences
Back to session: Coordination and Bargaining (SHORT)

What Causes Gamson's Law? Experimental Evidence on Coalitional Bargaining and Commitment
Aaron Kamm
NYU Abu Dhabi

ABSTRACT:
One of the most robust empirical findings on coalition governments is that government portfolios are allocated proportionally to the seat share of the parties forming the government. This empirical observation (known as Gamson's Law) is at odds with the economic theory on bargaining and previous experimental evidence. In the present paper, we examine if a two-stage negotiation process can reconcile these contradictions. We find strong support for the theoretical predictions which suggests that Gamson's Law might be caused by parties first forming the coalition and only in a second step bargaining over portfolios.

Author(s): Aaron Kamm, Simon Siegenthaler
Topic: Games: Bargaining, Public Choice: Voting and Rent Seeking
Back to session: Coordination and Bargaining (SHORT)

Coordination in volatile environments with time constraints and heterogeneities

Carles Sola
The Autonomous University of Barcelona

ABSTRACT:

The purpose of this paper is to analyze the effect of time constraints on organizational decision problems. To this end, we present an experimental analysis of coordination games in which subjects face specific time constraints in a volatile environment. In our basic 2X2 design, one of the factors involves situations in which all subjects face stringent decision time (seconds to select a strategy) constraints. Another factor varies what we call stringent feedback (seconds to review the outcome of the round) constraints. A key feature of our design is that we introduce volatility in the experiment by randomly distorting the payoffs in each round. At the end of the experiment, we elicit risk preferences and trust measures in economic contexts. The novelty of this approach is that we can refine behavioral patterns relative to the environments conducive to elicit trust/mistrust. These design choices allow us to quantify heterogeneities in trusting behavior to propose an analysis of how groups can achieve high coordination levels in highly volatile situations when participants are faced with differences in time allotments. Our results show that decision time constraints affect coordination outcomes more than feedback time constraints. Coordination outcomes become more volatile in this context, making initial conditions key to predict the long-term outcomes of the interaction. Heterogeneities in decision time have a similar strong effect, while heterogeneities in feedback time have no effect. Our results allow us to conclude that, in a more realistic environment for certain organizations, standard experimental results may not apply.

Author(s): Brandts, J., Ellis, J. and Sola, C.
Topic: Games: Coordination, Games: Other
Back to session: Coordination and Bargaining (SHORT)

Testing the Presence of Strategic Uncertainty in Multi-Stage Games

Konstantinos Georgalos
Lancaster University

ABSTRACT:

Traditional game theory assumes that when individuals face a sequential game with complete and perfect information, the principle of backward induction is applied in order to reach the sub-game perfect Nash equilibrium. Nevertheless, a rich experimental literature shows that subjects very often deviate from the Nash equilibrium. The behavioural game theory literature has provided various different explanations of why people fail to apply backward induction ranging from fairness considerations, errors in play, different depths of reasoning (level-k models) or non-expected utility preferences, to name but a few. In a recent paper Eichberger, Grant and Kelsey (2017), they propose an alternative solution concept for a class of extensive form games, introducing ambiguous beliefs and consistent planning in the centipede game. In this study, using data from various experimental centipede games, we use Maximum Likelihood Estimation techniques along with k-fold validation to test this new concept. We evaluate the descriptive (in-sample fit)
Beyond Outcomes: Experimental Evidence on the Value of Agreement

Philippos Louis
University of Cyprus

ABSTRACT:

Does an individual assign a higher value to a group decision she has explicitly agreed with? Or, is it only the features of the outcome that matter? As dealing with this question in natural settings is difficult, we employ a laboratory experiment where, after the group collectively decides on an issue, each individual may propose a revision of the group decision. We find that outcomes generated by congruent mechanisms -i.e. procedures that incentivise subjects to agree with the winning alternative- are revised to a far lesser extent compared to outcomes generated by outcome-wise identical mechanisms that encourage disagreement.

Author(s): Philippos Louis, Matias Nuez, Dimitrios Xefteris
Topic: Public Choice: Other, Social Behavior: Group Behavior
Back to session: Coordination and Bargaining (SHORT)

Information Disclosure and Bank Runs: An Experimental Study

Todd Kaplan
University of Exeter

ABSTRACT:

In March 2016, the Basel committee has continued its recommendations toward increased disclosure by banks about their financial state. Yet, the Federal Reserve has a policy of not publicly disclosing its CAMELS ratings. We investigate whether a policy of mandatory disclosure about a banks' fundamentals leads to a superior outcome over a non-disclosure policy. We report on an experiment that uses a framework inspired by the Diamond-Dybvig (1983, Journal of Political Economy) model. Here, two depositors must simultaneously decide on whether to withdraw their deposits today or tomorrow. The return to the long-run security or the Bank's fundamentals, R, is uncertain. We vary the policy regime: depositors either have full information (i.e., full disclosure) about R or no information (i.e., non-disclosure). We also vary the expected value of R. We find contrasting evidence on the impact of full disclosure. Specially, when R is on average high, such that bank runs are rarely efficient, full information is harmful as it leads to more runs. In contrast, when R is on average low, and it is individually rational though socially inefficient to run, full information is helpful in mitigating bank runs.

Author(s): Surajeet Chakravarty, Lawrence Choo, Miguel A. Fonseca, Todd R. Kaplan
Topic: Games: Coordination, Games: Information
Back to session: Coordination and Bargaining (SHORT)

Teaching to Alternate and the Theory of Mind

Jasmina Arifovic
Simon Fraser University


ABSTRACT:

Literature on repeated battle of the sexes games reports a number of different outcomes which most frequently include convergence to one of the Nash equilibria or to alternating patterns. Arifovic and Ledyard (2018) develop a version of their Individual Evolutionary Learning (IEL) that can replicate these different behavioral patterns. Alternation can be generated with a presence of an 'inspired' agent. This is the agent that starts out endowed with a set of alternating strategies which are then subject to evolutionary forces. In other words, if the other player does not adopt alternation, these alternating strategies will not survive over time. In this paper, we investigate whether we can develop a 'theory of mind' approach by modelling a player who starts out with a collection of different beliefs about other player's type. The beliefs change over time in response to accumulated experience about other player's actions. We investigate if an alternation can 'emerge' as an outcome of the interactions of the 'theory of mind' player with the less sophisticated IEL players.

Author(s): J. Arifovic, Leydard, J., and Laughren  
Topic: Games: Coordination, Decision Theory: Learning  
Back to session: Coordination and Bargaining (SHORT)

Delegation to a Group of Experts

Moritz Janas  
University of Konstanz

ABSTRACT:

We study a model of decision-making with career-concerned experts and costly information acquisition. A principal can choose between two scenarios: 1) consulting each expert individually and deciding herself or 2) delegating the whole decision-making process to a committee of the experts. These two options create a trade-off between information acquisition and information aggregation. Theoretical results show that the level of cost for information acquisition determines which scenario should be preferred. Testing the results in a laboratory experiment reveals that due to excessive information acquisition, delegation always outperforms individual consultancy even when it is predicted not to. The experimental data reveals principals have an intrinsic utility of keeping the decision right and therefore forgo pecuniary incentives by preferring individual consultancy over delegation.

Author(s): Sebastian Fehrler, Moritz Janas  
Topic: Social Behavior: Group Behavior, Games: Information  
Back to session: Decision Making

Strategic Nudging in the Beauty Contest Game

Christoph Buhren  
University of Kassel

ABSTRACT:

The original beauty contest game (with the rules to choose a number between 0 and 100 with the winning choice being closest to the target number of 2/3* average of all chosen numbers) is a prime example for studying the limits of higher order belief reasoning. After more than 25 years of research with this game with varieties of parameters as e.g. two players vs. n>2 player games, professional players, team play, etc. no study could instantaneously attain the Pareto optimal unique equilibrium or even getting close to it. In this study, we introduce various forms of anchors in order to strategically nudge human subjects with or without any prior game theoretic knowledge or experience with the game. Professionals typically find the equilibrium strategy and play close to it. However, for inexperienced subjects only in games where choosing anchors are identical to the equilibrium choices, average play is close to equilibrium. Professionals correctly increase the distance to equilibrium when playing against inexperienced subjects in the case
Deciding to delegate: on distributional consequences of Endogenous (and Compulsory) Delegation

Lara Ezquerra
Middlesex University

ABSTRACT:

We study delegation in a dictator game where principals delegate the decision or decide on the allocation themselves. Roughly half the subjects choose to delegate. Relative to compulsory delegation, the resulting distribution is more egalitarian under endogenous (delegation). Under delegation the allocation outcomes made by agents are similar to those observed under a standard dictator game. Finally, although principals still switch due to higher amounts redistributed under endogenous delegation, the effect is weaker than under compulsory delegation.

What Makes Pyramid Schemes Work?

Gonul Dogan
University of Cologne

ABSTRACT:

Ponzi and pyramid schemes promise a large return for investors with no risk. In reality, investors get a fraction of subsequent investors' money causing most entrants to lose all their money when the scheme collapses due to lack of new entrants. Such schemes are illegal and deemed fraudulent. In an online experiment without deception, we invite participants to invest in a pyramid investment scheme with a negative expected return. We investigate whether higher returns increase participation despite effectively funneling more money to the top. We study whether the ability to do backward induction, education level, and risk preferences explain entry decisions.

A new method to elicit probability distribution beliefs

Thomas de Haan
Norwegian School of Economics (NHH)

ABSTRACT:

I introduce a method to elicit belief distributions. With this method, an agent's payoff not only depends on the realised state and the elicited distribution, but also on a random two-level partitioning of the state-space. As the number of
relevant states or 'bins' increases, the set of best-response distributions converges asymptotically to the agent's true belief. I compare the introduced 'Random Partitions' method with both the well known 'Quadratic Scoring Rule' (Brier 1950 and e.g. Selten 1998), and the 'Karni method' (Karni, 2009) and argue that the random partitions method gives stronger truth-telling incentives to agents in situations where there are many bins.

Author(s): Thomas de Haan

Topic: Decision Theory: Beliefs, Methodology: Experimental Design, Tools and Practices

Link: https://www.nhh.no/en/employees/faculty/thomas-de-haan/

Back to session: Decision Theory (SHORT)

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Anchoring bias in annuity choices: An experimental investigation

Abigail Hurwitz
HUJI and COMAS

ABSTRACT:
The need to ensure people have adequate savings for retirement has prompted debate among regulators and academics. Certain countries have implemented or are considering implementing mandatory minimum annuity laws (e.g., Singapore and Israel), whereas others have repealed or are considering repealing such legislation (e.g., the U.K.). We investigated the introduction and repeal of mandatory minimum annuity laws using a laboratory experiment and two surveys (of students and a representative sample of the age-relevant population). Demand for annuities (vs. a lump sum) was sensitive to the mandatory-minimum mechanism and consistent with anchoring to the signal reflected in the requirement. Imposing a mandatory minimum did not guarantee an increase in the demand for annuities and the outcome was sensitive to the relation between the level of the mandatory minimum and anticipated consumption (i.e., future financial need). The repeal of mandatory minimum annuity laws does not necessarily restore the demand for annuities to the level before implementation of the constraint.

Author(s): Abigail Hurwitz, Orly Sade, Eyal Winter

Topic: Decision Theory: Bounded Rationality, Public Choice: Other

Back to session: Decision Theory (SHORT)

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Judgments of extent in the economics laboratory: Are there brains in choice?

John Smith
Rutgers University-Camden

ABSTRACT:
We design a choice experiment where the objects are attribute-free and we can observe the true preferences of the subject. Here the objects of choice are the lengths of lines. Subjects are given a choice set involving several lines of various lengths and are told to select one of them. Subjects can only view one line at a time. This design simulates the feature that deliberation about the desirability of an object compared to another object crucially involves the memory of the assessment of objects. This design also allows us to observe the search history of the subject. Subjects attempt to select the longest line because they are paid an amount that is increasing in the length of their selection. Subjects also make their choice while under a cognitive load. Specifically, some choices are made when the subject is required to remember a 6-digit number (high cognitive load) and other choices are made when the subjects is required to remember a 1-digit number (low cognitive load). We have observations about the searches and the choices of subjects under the different cognitive load treatments. We find that subjects in the high load treatment conduct worse searches in that they are less likely to view every line before making a choice and view fewer lines than those in the low load treatment. We also find that subjects in the high load treatment make inferior choices. In particular, the difference between the selected and longest line is larger in the high load treatment. Our results suggest that choice, even among attribute-free objects, is affected by the availability of cognitive resources.

Author(s): John Smith

Topic: Decision Theory: Bounded Rationality

Back to session: Decision Theory (SHORT)
The strategic environment effect in beauty contest games

Angela Sutan
Burgundy School of Business

ABSTRACT:
Recent experimental studies have shown that observed outcomes deviate significantly more from the Nash equilibrium when actions are strategic complements than when they are strategic substitutes. This 'strategic environment effect' offers promising insights into the aggregate consequences of interactions among heterogeneous boundedly rational agents, but its macroeconomic implications have been questioned because the underlying experiments involve a small number of agents. We studied beauty contest games with a unique interior Nash equilibrium to determine the critical group size for triggering the strategic environment effect and we use both theory and experiments to shed light on its effectiveness. We show theoretically that the effect operates for interactions among three or more agents. Our experimental results show a statistically significant strategic environment effect for groups of five or more agents, establishing its robustness against the increase in the population size. We also implemented mouse-scanning experiments in order to identify paths in the way in which individuals choose numbers and scan strategies. Our results bolster experimental findings on the strategic environment effects that are relevant for macroeconomic issues such as price fluctuations and nominal rigidity.

Preferences for integrated gains and segregated losses - A contradicting case of prospect theory?

Therese Lind
Economics

ABSTRACT:
Could underlying preferences for particular payment structures be a cause of cumulative neglect (i.e. the difficulty of observing and attaching value to a stream of payments)? By means of a vignette experiment we investigate preferences for lump'sum payments versus cumulative payment structures and how these preferences differ between gain and loss situations. We investigate the case when payments belongs to one event, i.e. one mental account. In this type of event we hypothesize that people might have underlying preferences for integrating gains and segregating losses. We contrast our hypothesis by comparing to the predictions made by economic theory, prospect theory and hedonic editing. As expected, in the gain domain a large proportion of participants display patience when faced with the choice to wait for a couple of months for a larger sum of money or to receive smaller amounts with regular intervals over the time horizon they would otherwise wait, in line with our hypothesis. However the effect is context dependent and overall we do not find strong support for our hypothesis. For the loss domain we find that people prefer to pay their debts straight away if they are given the choice. The results show that the theories we frequently use to evaluate integration and segregation of financial events; economic theory, prospect theory and hedonic editing, are highly context dependent.
Pushing Through or Slacking Off? Heterogeneity in the Reaction to Rank Feedback

Florian Hett
Goethe University Frankfurt

ABSTRACT:

This paper studies heterogeneity in the reaction to rank feedback. In a laboratory experiment, individuals take part in a series of dynamic real-effort contests with intermediate feedback. To solve the identification problem in estimating the causal effect of rank feedback on subsequent effort provision we implement a random multiplier in the first round of each contest. The realization of this multiplier then serves as a valid instrument for rank feedback. While rank feedback has a robust effect on subsequent effort provision on average, an explicit analysis of between-subject heterogeneity reveals that a substantial fraction of participants in fact react entirely opposite than the aggregated results indicate. We further show that this heterogeneity has consequences for overall outcomes, thereby arguing that heterogeneous sensitivities to rank feedback could have implications for the design of various policies in education and organizations.

Author(s): Florian Hett, Felix Schmidt
Topic: Decision Theory: Preferences, Applied Economics: Other

Utility maximization with sensory limitations: theory and evidence

John Stovell
Brigham Young University

ABSTRACT:

We reinterpret the utility representations pioneered by Strotz (1955) and extended by Gul and Pesendorfer (2001) in the self-control literature to consider the optimizing behavior of individuals who are exposed to many latent stimuli but prone to experience only the most salient one. We show that individuals with such preferences may find it optimal to engage in seemingly dysfunctional behavior such as self-harm. Our model also explains the behavior of individuals experiencing depression or trapped by multiple competing problems, as well as sheds light on the existence of first world problems. We present experimental evidence suggesting such preferences explain the behavior of more than two thirds of subjects exposed to single and multiple painful stimuli.

Author(s): Lars Lefgren, Olga Stoddard, John Stovall
Topic: Decision Theory: Other, Decision Theory: Bounded Rationality

Probability Matching and Randomization in Lottery Choice and Games

Paul Healy
Ohio State University

ABSTRACT:

Probability matching is an example of randomized choice that leads to stochastically dominated decisions. We also see randomization in games when no randomization is needed. In this paper we explore whether the sources of randomization are the same across various domains, and whether we can 'shut off' randomization through various
Cortisol Meets GARP: The Effect of Stress on Economic Rationality

Elena Cettolin
Tilburg University

ABSTRACT:
Rationality is a fundamental assumption of economics. It is however unclear if this assumption holds when decisions are made under stress. The answer to this question is of utmost importance because stress is ubiquitous in modern societies. In a laboratory experiment we randomly induced stress in participants by using the Cold Pressor Test. Stress was measured by assessing the concentration of cortisol in saliva at different points in time during the experiment. To measure participants' degree of economic rationality, we asked them to make choices in fifty independent problems designed to evaluate the consistency of their choices with the Generalized Axiom of Revealed Preference (GARP). We find that participants exposed to our stress manipulation experienced a significant increase in their cortisol levels compared to those in the placebo group. However, the raise of cortisol did not decrease rationality as measured by consistency of choices with GARP. Our findings provide empirical support for the robustness of economic theory's foundations.

Author(s): E. Cettolin, P.S. Dalton, W.J. Kop, W. Zhang
Topic: Decision Theory: Bounded Rationality, Decision Theory: Other
Back to session: Decision Theory (SHORT)

Historical information and project duration estimates

Matej Lorko
Macquarie Graduate School of Management

ABSTRACT:
The ability to accurately estimate the duration of future activities is the cornerstone of successful project management practice. Traditionally, thorough project specification has been perceived as a crucial determinant of accurate project duration estimates. However, even the most extensive description cannot capture every detail of the proposed project activities. Thus, project planners focus on provided information, often neglecting that it might be incomplete. As a result, project duration estimates may become understated. We conjecture that accuracy of project schedules can be improved by consulting historical information regarding the same or similar projects. We further conjecture that since acquisition of historical information is costly, the decision to acquire it is driven by planners' confidence in their initial estimates. Planners with low confidence pay more attention to the historical information and are willing to pay more to obtain them. We experimentally test our conjectures in a real effort task. Subjects first estimate the time it will take them to complete the task and then perform it. We manipulate the description of the task and whether subjects receive the historical information. We examine the relationship between the amount of available information, duration estimation accuracy, subjective confidence in estimates and the willingness to pay for historical information.

Author(s): Matej Lorko, Maros Servatka, Le Zhang
Topic: Decision Theory: Beliefs, Decision Theory: Ambiguity
Back to session: Decision Theory in the Field
Being in the Right Place: A Natural Field Experiment on the Causes of Position Effects in Individual Choice

Chris Wilson
Loughborough University

ABSTRACT:
This paper uses a natural field experiment to better understand the reasons why individuals show a disproportionate tendency to select items placed in the top position of a list. After randomizing the order in which new economics research papers are presented in email alerts and tracking economists' subsequent download activity, we provide evidence of position effects and reject three common explanations regarding item order, choice fatigue and quality signals. Instead, after developing some novel tests based on the user-level nature of our data, we show that three more subtle explanations are consistent with the behavior of different groups of individuals.

Author(s): Mark Harris, Marco Novarese and Chris M. Wilson
Topic: Decision Theory: Bounded Rationality, Field Experiments: General
Link: https://www.dropbox.com/s/92o504trjt502ns/ConfSubmissionJan2018.pdf?dl=0

Cognitive Biases and Expert Judgement in Natural Resource Management

Esther Schuch
Wageningen University

ABSTRACT:
Natural resource management relies upon expert judgements due to limited data availability and uncertainty of natural processes. Research has shown that expert judgements are subject to cognitive biases. Most of the cognitive biases in expert judgement, e.g. anchoring or overconfidence bias, cause an overemphasis of previous results. Since the assessments conducted by experts are used to inform policy makers, an overemphasis of prior results can endanger the sustainability of the resource. An example are fish stock assessments which are conducted by few specialised scientists and provide the basis for European fisheries management. We are analysing whether fish stock assessments overemphasise previous results which we use as an indicator for the prevalence of cognitive biases. We show that whenever expert judgement is employed there is a tendency to confirm prior estimates. We found that assessments are prone to cognitive biases if ambiguous data, uncertainty of natural processes, and flexible assessment types are prevalent.

Author(s): Esther Schuch, Martin Patoors, Andries Richter
Topic: Decision Theory: Bounded Rationality, Decision Theory: Other

Ambiguity Aversion and Demand for Weather Information in Agricultural Technology Adoption; Case of Namibia

Chalmers Mulwa
UNIVERSITY OF CAPE TOWN

ABSTRACT:
Climate change has compounded the uncertainties inherent in agriculture. Farmers have to make decisions faced with increasingly fluctuating weather, leaving them vulnerable. Access to climate-related information in developing
countries, incidentally also the hardest hit by adverse effects of climate change, is very limited. Given a choice set of technologies that yield different payoffs depending on seasonal weather outcomes, ambiguity arising from imprecise weather information may lead to sub-optimal choices. It is however not clear how providing information that reduces this imprecision can better farmer decision-making. Using data from a framed experiment carried out with 300 farmers in northern Namibia, this study investigates how imprecise information about the weather affects farmers' decision making. Further, the study traces out demand for information that reduces imprecision in weather prediction by eliciting farmers' willingness-to-pay for concise information, given varying degrees of imprecision. Understanding how provision of information changes decision making under uncertainty, and the demand for this information, is important in guiding policy given the adverse effects of climate change on agricultural outputs and livelihoods.

Author(s): Mr. Chalmers Mulwa; Prof. Martine Visser
Topic: Decision Theory: Ambiguity, Games: Information
Back to session: Decision Theory in the Field

The Cancellation Heuristic in Intertemporal Choice

Krishna Savani
Nanyang Technological University

ABSTRACT:

The present research investigated a novel heuristic in intertemporal choice, the cancellation heuristic. We proposed that when a smaller sooner reward (e.g., $7,000 today) and a larger later reward (e.g., $10,000 in five years) are presented in a manner that allows people to cancel out a seemingly common amount (e.g., $6,000 + $1,000 today vs. $6,000 + $4,000 in five years), people would ignore the seemingly common amount (i.e., $6,000) and compare the remainders (i.e., $1000 today vs. $4000 in five years). Given diminishing marginal utility, the same monetary increase (e.g., $3000) has a higher utility value when people are choosing between smaller amounts (e.g., $1000 vs. $4000) than when they are choosing between larger amounts (e.g., $7000 vs. $10,000). Thus, we predicted that the cancellation heuristic would make people more likely to choose the larger later reward over the sooner smaller reward. Our experiment confirmed this idea-when a seemingly common amount was separated from both the smaller sooner and the larger later rewards, the choice share of the larger later reward increased from 55.5% to 84.4%. We further investigated the underlying mechanism by measuring the curvature of participants' utility curves using a separate convex budget set task (adapted from Andreoni and Sprenger 2012). We found that participants whose utility curves had higher curvature were more susceptible to the cancellation heuristic, indicating that the cancellation heuristic works because of diminishing marginal utility. A follow-up survey identified a policy application: separating US Social Security retirement payments into two different components, one constant across different retirement ages and one increasing with the retirement age, made people more likely to choose to retire one year later (and thus receive larger later Social Security payments for the rest of the lives) compared to the standard baseline. These findings document a novel bias in intertemporal choice, and highlight an element of choice architecture that has received little attention: whether options are presented as unitary entities or separated into components.

Author(s): Krishna Savani, Arjun Sengupta, Dawei Wang
Topic: Decision Theory: Preferences, Decision Theory: Bounded Rationality
Back to session: Decisions under Uncertainty (SHORT)

Time Preferences and Financial Decisions among the Elderly

Marius Sossou
Universite Laval

ABSTRACT:

In this paper, we investigate whether the discount factor of the elderly affects their portfolio choices. We estimate time
preferences using inter-temporal choice data from a hypothetical experiment in a representative sample of American elders and a structural model of decision-making accounting for lifetime uncertainty. Our results indicate considerable heterogeneity in the elderly population. Women are more patient than men. Wealth and income are associated with high discount factor. We further find that cognitive skills, health and education positively affect time preferences. Moreover, we find that older people who display higher discount factor are more likely to own retirement accounts and risky assets. We also find that individuals who are more patient decrease the share of financial wealth held in safe assets and increase the share of financial wealth held in risky assets. These findings suggest that time preferences shift investment from safe assets toward other financial assets, other things being the same.

Author(s): Marius Sossou
Topic: Decision Theory: Preferences, Field Experiments: General
Back to session: Decisions under Uncertainty (SHORT)

Moral hazard and financial incentives for risk reduction in natural disaster insurance

Jantsje Mol
Vrije Universiteit Amsterdam

ABSTRACT:
In a world in which economic losses due to natural disasters are expected to increase, it is important to study risk reduction strategies, including individual investments of homeowners in damage reducing (mitigation) measures. We use a lab experiment to investigate the effects of different financial incentives, risk levels and deductibles on damage reducing investments in a natural disaster insurance market. A particular focus is to examine how these investments are jointly influenced by financial incentives, like a disincentive from moral hazard or positive incentives from premium discounts or a mitigation loan, and behavioral characteristics, like individual risk and time preferences. Participants (n = 357) invest more in the Discount treatment, but not in the Loan treatment. Investments increase when the expected value of damage increases (i.e. higher deductibles, higher risks). Moral hazard is found in the high risk scenarios (15%) but not in the low risk scenarios (3%) which suggests that moral hazard is no issue in a disaster risk insurance market where probabilities are low.

Author(s): Jantsje M. Mol, W. J. Wouter Botzen & Julia E. Blasch
Topic: Applied Economics: Other, Decision Theory: Risk
Back to session: Decisions under Uncertainty (SHORT)

Pre-election surveys and heuristics - A field experiment

Sabine Kroeger
Department of Economics, Laval University

ABSTRACT:
Pre-election polls play a key role in modern elections and referenda and can thus directly impact policymaking and social welfare. In particular, they are used by candidates to select their electoral platforms and decide on their effort to mobilize voters. Hence, the importance of having reliable polls. Some poll predictions have however been noticeably different from the actual election outcomes. In this paper, we evaluate the accuracy of predictions of election outcomes based on pre-election polls using different designs, notably binary and probabilistic questions on own voting intentions and the predictions on the general election outcome. We contribute thus to the literature on the comparison between those two formats (Manski 1990, 2002, Delavande and Manski 2010). We report results from a field experiment conducted before a real referendum on the affiliation of a local University student organisation to a national student representation held amongst undergraduate students in November 2017. We extend seminal work by Manski and Delawande (2012), who identified heuristics in empirical poll responses. Notably, we study the possibility that poll respondents ignore the correlation between their policy preferences and their costs of voting. In practice, correlation
between voting costs and ideology can arise for many reasons. Political organizations, for example, can facilitate voter registration of specific ideological groups of citizens (see, e.g., Morton, 2006), lowering their costs of voting. If, at the time of a poll, members of those groups ignore the correlation between their own ideology and the mobilization efforts targeted at their group, their responses will be biased, resulting in faulty predictions.

Author(s): Arnaud Dellis and Sabine Kroeger
Topic: Decision Theory: Beliefs, Public Choice: Voting and Rent Seeking
Back to session: Decisions under Uncertainty (SHORT)

Demand for Decision Autonomy and Willingness to Take Responsibility in Risky Environments: Experimental Evidence

Mehmet Yigit Gurdal
Bogazici University

ABSTRACT:

This paper experimentally studies individuals' willingness to pay for the authority to make risky decisions for themselves, and on behalf of another person, as primary determinants of leadership willingness. We consider a setup involving a pair of individuals, where one individual is designated to make both parties' decisions by default. Depending on treatment, either party can express a willingness to pay to change this situation. If one's willingness to pay to make her own decision herself is positive, we interpret it as a demand for autonomy; if it is negative, it shows a desire to delegate. On the flip side, if the willingness to pay to make a decision on behalf of another person is positive (negative), we interpret it as a demand for taking (a desire to avoid) responsibility. Results suggest that (1) the demand for autonomy is significantly positive, (2) the willingness to take responsibility is significantly positive but lower than that for autonomy, (3) the willingness to pay to both autonomy and responsibility are lower among women, (4) men demand more autonomy when the person making the decision for them is male, (5) altruistic individuals are more likely to pay to avoid taking responsibility for others' decisions. We also explore differences between individuals' own decisions and the decisions they make on behalf of others, and their correlates. The results have implications for the allocation of decision-making authority in groups and leadership.

Author(s): Seda Ertac, Mert Gumren, Mehmet Y. Gurdal
Topic: Decision Theory: Risk, Social Behavior: Group Behavior
Back to session: Decisions under Uncertainty (SHORT)

A behavioral theory of startup growth: do high opportunity cost individuals try to scale up faster?

Alessandra Luzzi
BI Norwegian Business School

ABSTRACT:

High opportunity cost individuals are less likely to choose entrepreneurship. If they do, their ventures perform better on average both because they tend to have higher human capital and because they are more selective and better at identifying opportunities. Since, by definition, they have higher outside options, higher opportunity cost founders also have different expectations and performance thresholds than other firm founders. Therefore, they are less likely to persist with relatively low returns. In this paper, we propose, and empirically test, that high opportunity cost entrepreneurs are more eager to show the potential of their venture early than to survive per se. Therefore, they are more likely to try to scale up their venture faster taking more risk and investing more aggressively at early stages. We test our predictions using Norwegian microdata for firms founded between year 2000 and 2008 that we follow until 2013. Our preliminary results confirm our predictions.
Gender, Cognitive Ability, and Risk Preferences at an Early Age

Amalia Di Girolamo
University of Birmingham

ABSTRACT:
We design a new and simple risk preference elicitation task and conduct experiments with over 1,400 children and adolescents ages 3-15 years old to explore risk preferences at an early age. We complement our data on risk preference with a comprehensive assessment of cognitive and non-cognitive skills. First, we find that adolescent girls display significantly greater risk aversion than adolescent boys. This pattern is not observed among young children, suggesting that the gender gap in risk preferences emerges sometime in early adolescence. Second, we find that cognitive and non-cognitive skills play a role in risk preferences. Specifically, children and adolescents with higher cognitive skills are more likely to take risks. This result seems to be driven by math ability, and is robust to socio-economic and demographic controls. The association of non-cognitive skills with risk taking is more mixed, with a negative association of non-cognitive skills and risk-taking among children and no association among adolescents. Finally, we find that among adolescents, risk seeking preferences are associated with a higher likelihood of disciplinary referrals. For academics, our research provides a deeper understanding into the developmental origins of risk preferences. For policymakers, our work provides insights into optimal times to intervene in the education production function.

How much risk is too much risk? Accounting for background risks in the analysis of higher-order risk preferences

Irene Mussio
UMass Amherst

ABSTRACT:
Poor health status, job instability and labor income volatility (liquidity constraints) could be thought as risks that are pre-existing, uninsurable and undesirable for individuals. Pre-existing risks are not diversifiable, while individuals could choose the levels of other types of risks, such as the allocation of a portfolio. Pre-existing risks that cannot be avoided or insured against are defined as background risks. Furthermore, individuals are in practice almost never faced with one single risk. Individuals usually face bundles of risk that might be correlated with each other, such as a chronic illness and income constraints. These risks can also include gains and losses for the individual not only in terms of financial risk but on job or income stability, among others. When building an individual risk profile, the background risks an individual has should be accounted for, as these risks have an impact on decisions that involve financial, health-based, location and liquidity risks, among others. However, the analysis of risk preferences has usually focused on risk aversion (second-order risk preference). Risk aversion is just one piece of an individual's risk-profile, which is composed of other higher-order risk aversion measures, such as preference (third-order) and temperance (fourth-order). Several experiments have found that most individuals are risk averse, and although higher-order risk attitudes are less well understood, the recent experimental literature has found evidence for prudence and for temperance to a lesser degree. This means that the study of how the different background risks the individual has a priori impacts risky decisions has not been thoroughly examined. Our study will bring together the analysis of how different types of additional, exogenous background risks impact decisions, and how decisions could change depending on the background risk pool.
The individual previously has. Our focus will be on how pre-existing risks impact individual risk and higher-order risk preferences. We seek to answer the following questions: Does the introduction of background risk make individuals more risk averse, prudent and temperate when accounting for individual pre-existing background risks? Do different types or bundles of background risk (chronic illness versus job instability) impact individual risk-related decisions in the same way? The existing literature has not examined the impact of adding background risk and analyzing risk and higher-order risk preferences taking into account pre-existing individual background risks. But, in practice, individuals make risky decisions on a regular basis, so background risk would have an impact on current and future decisions. The question is whether more background risk makes individuals behave differently. Moreover, models that ignore background risk could generate biased estimates of individual risk preferences.

Author(s): Irene Mussio, Angela de Oliveira

Topic: Decision Theory: Risk, Decision Theory: Preferences

The Impact of Natural Disasters on Social Preferences: A case study from typhoon Yolanda in Panay, Philippines

Bjoern Vollan
University of Marburg

ABSTRACT:
Periodic natural disasters are accompanied by major economic and personal losses which are suggested to result in negative long term effects on development. Solidarity is considered an important aspect of post disaster recovery and we study whether experimentally measured solidarity helps in the recovery process and whether the experience of a typhoon builds additional social capital in form of higher village solidarity. Since it is very hard to foresee where and when natural disasters occur, one common challenge is the lack of an appropriate baseline dataset. As a result, a substantial number of cross sectional studies on pro-sociality, risk preferences, and time preferences found conflictive evidence. We investigate the effect of an exceptionally strong tropical typhoon (Yolanda, November 2013) using an unique experimental panel data set collected in 30 villages in the region of the Western Visayas in the Philippines before and after the disaster (2012 & 2016). In both years, 810 participants took part in our experiments, whereas 449 individuals participated in both samples. Our preliminary results show no long term effects of experiencing natural disasters on solidarity, indicating that other changes in the environment, such as the efficient and fair provision of disaster relief, might be more influential on the following social dynamics. Although damages were sizable, our data reveals no long term differences in income or savings, although debt seems to have declined more in affected areas. However, there seem to be substantial short term effects of the degree of exposure to solidarity. After priming participants towards typhoon Yolanda we observed an increase in solidarity transfers, regardless if individuals were primed towards 'positive' or 'negative' events that followed the catastrophe. Focus group discussion also revealed short term increases in solidarity in highly affected areas as well. We also observe no substantial differences in perceived corruption that might have occurred due to the disaster relief process.

Author(s): Vollan, Kampenhuber, Hayo, Landmann


Cognitive Foundations of Passive Choices

Andreas Grunewald
University of Bonn

ABSTRACT:
Passive behavior is ubiquitous in many economic environments—even if there are various alternatives, decision makers fail to take any decision. This paper provides evidence on the cognitive foundations of passive choices. Using an experimental setup that allows for passivity, we first show that scarce cognitive resources induce passive behavior. In particular, scarcity of cognitive resources causes subjects to devote less attention to a decision task or to even completely ignore the task, resulting in passivity. We also study the effects of two choice-enhancing interventions. We document that these have the potential to reduce passive choices, thereby increasing subjects' performance in the decision task. However, we also show that the interventions trigger a negative spillover as they force subjects to withdraw cognitive resources from other domains. As a consequence, the resulting overall effect on the subjects' payoff is essentially zero.

**Author(s):** Steffen Altmann, Andreas Grunewald, Jonas Radbruch  
**Topic:** Applied Economics: Economic Development, Applied Economics: Other

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**The Effect of Housing Conditions on Preferences and Cognitive Function**

Ondrej Krcal  
Masaryk University

**ABSTRACT:**

This paper studies the causal effect of improved housing conditions on people's risk and time preferences and cognitive function. Understanding the effects of improved housing quality is important for evaluating public housing policies as well as for understanding the impact of bad housing conditions on the choices of poor people and their ability to improve their economic situation. The data will be collected from adult participants of a unique randomized controlled trial 'Rapid Re-Housing' that is currently running in Brno in the Czech Republic. In this trial, a randomly selected group of homeless families were moved to municipal flats, while the control families were not helped by the city and, in the majority of cases, remained in bad housing conditions. Risk and time preferences and cognitive function will be measured using standard incentivized questionnaires. The experiment will be conducted in March and April 2018.

**Author(s):** Ondrej Krcal, Rostislav Stanek, Tommaso Reggiani  
**Topic:** Applied Economics: Economic Development, Decision Theory: Preferences

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**Discrimination as favoritism: The private benefits and social costs of in-group favoritism in an experimental labor market.**

David Masclet  
University of Rennes 1

**ABSTRACT:**

We examine both the private benefits and spillover costs of labor market favoritism in a unique laboratory experiment design. Group identities are first created and the data show that both employment preference rankings and wage offers favor in-group members. Workers positively reciprocate towards in-group employers by choosing higher effort in a gift exchange game. Thus, favoritism can be privately rational for employers. However, unemployed subjects are allowed to burn resources (at a cost to themselves), and we document significantly increased resource destruction when unemployment can be attributed to favoritism towards others. This highlights a significant spillover cost of favoritism that is often ignored, and it points to one possible micro-foundation of some anti-social behavior.

**Author(s):** David L. Dickinson David Masclet and Emmanuel Peterle  
**Topic:** Applied Economics: Labor Market, N/A
Who should (not) benefit from affirmative action? Ability, effort, and luck as justifications for quota rules

Chi Trieu
Dusseldorf Institute for Competition Economics

ABSTRACT:

Despite the growing experimental evidence on the consequences of affirmative action, little is known about the underlying conflict of perceived fairness of affirmative action schemes and their consequences for efficiency of outcomes such as average performance. With this paper, we aim at filling this gap by implementing three types of affirmative action schemes: one favors individuals disadvantaged due to bad luck or discrimination (impersonal factor), one favors individuals disadvantaged due to personal but out-of-control factors (such as innate productivity), and one favours individuals who are less successful due to a personal and in-control factor like low effort provision. Our research question is 'Do the consequences of affirmative action depend on whether it favors individuals with low productivity, low effort, or those with bad luck?'. We examine outcomes of affirmative action in a tournament context, and investigate both immediate outcomes (efficiency / average performance and willingness to compete) and post-tournament outcomes (cooperation within a group of co-workers, and spiteful behaviors targeting individuals favored by affirmative action). Our hypotheses are that affirmative action in favor of low effort individuals is perceived as unfair while affirmative action for bad luck individuals is perceived as fair, and the fairness perception of affirmative action for low ability individuals is intermediate. Schemes that are perceived as less fair are hypothesized to trigger lower levels of post-competition cooperation among groupmates and higher level of retaliation. Moreover, we can test whether our data on the various types of affirmative action confirm the predictions by Balafoutas and Sutter, 2012; and Balafoutas et al., 2016 that affirmative action does not harm overall efficiency, defined as the average number of correctly solved grids by a group (per minute). To the best of our knowledge, our study will be the first to study efficiency consequences of affirmative action schemes related to ability and effort provision as well as the first to systematically compare affirmative action schemes based on bad luck / discrimination, effort, and ability in a unified framework. Moreover, we will provide first experimental evidence on heterogeneity in perceived fairness of the various affirmative action schemes. By incorporating three types of fairness ideals into the perception of affirmative action, we will offer explanations for possible adverse consequences of this policy. In addition, we will also provide policy implications concerning how to frame affirmative action in order to minimize unwarranted consequences of affirmative action such as reduced cooperation or even retaliation amongst co-workers.

Author(s): Hannah Schildberg-Hoerisch, Chi Trieu, and Jana Willrodt
Link: https://www.dropbox.com/s/467cfkdbqao1zjj/Schildberg-H%C3%B6risch%20Trieu%20Willrodt%2020%282018%29%20.pdf?dl=0

The effect of photos and name change on discrimination against migrants in Austria

Doris Weichselbaumer
Johannes Kepler University Linz

ABSTRACT:

In German speaking countries, it is common for applicants to include their photographs to their resume when applying to a job. This experiment takes advantage of this procedure as it allows for two different indicators for migration background in an experimental setting: the name and the photograph of a candidate. In this study we examine the employment chances of migrants for whom these indicators diverge. Adopting a local name may be interpreted as a signal for higher levels of integration and help job applicants even if their photos reveal a non-white ethnicity and thereby a migration background. Another question we tackle concerns the effect of attaching a photo at all. In the public
debate it is often argued that the attachment of photographs may hurt minorities as it makes their minority status more salient in an application. For this reason we examine whether migrants can better their relative employment chances by not attaching photographs. We find that when attaching photographs, African but not Asian applicants suffer from discrimination in our experimental setting. African candidates can better their chances by adopting a local name, but even then they remain discriminated in comparison to autochthonic Austrians. Interestingly, if candidates do not attach photos despite the convention to do so, we find discrimination not only against African, but also Chinese applicants.

**Author(s):** Doris Weichselbaumer and Julia Schuster  
**Topic:** Applied Economics: Labor Market, Field Experiments: General

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**How Do Gender Quotas Affect Hierarchical Relationships? Complementary Evidence from a Representative Survey and Labor Market Experiments**

**Edwin Ip**  
Monash University

**ABSTRACT:**

Gender quotas are frequently proposed to address persistent gender imbalances in managerial roles. However, it is unclear how quotas for female managers affect hierarchical relations within organizations and whether they improve or damage relationships between managers and their subordinates. We conduct a representative survey and a novel set of laboratory experiments to study opinions on quotas for female managers and investigate how they influence workplace behaviour in terms of wages and effort provision. Our findings reveal that both opinions about gender quotas and resultant workplace behavior crucially depend on the workplace environment. In our survey, we observe that approval for gender quotas is low if women are not disadvantaged in the manager selection process, regardless whether there are gender differences in performance. Complementing this evidence, we observe in our experiments that quotas lead to lower effort levels and lower wages in such environments. In contrast, in environments where women are disadvantaged in the selection process, we observe a higher approval of quotas leading to higher effort levels and higher wages. These findings are consistent with the idea that meritocracy determines cooperativeness and suggest that it is crucial to evaluate the existence of gender disadvantages in the workplace environment before implementing quotas.

**Author(s):** Edwin Ip, Andreas Leibbrandt, Joseph Vecci  
**Topic:** Applied Economics: Labor Market, Social Behavior: Other

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**Discrimination at the Extensive and Intensive Margin**

**Joe Vecci**  
University of Gothenburg

**ABSTRACT:**

There is a large body of research documenting the prevalence of discrimination in the labour market, focusing primarily on identifying, at the extensive margin, possible types of discrimination. For example, while looking for a job whether one faces statistical and/or taste based discrimination. Despite survey evidence indicating the existence of discrimination at the intensive margin, such as discrimination while working on the job, there is little evidence investigating discrimination in this setting and the intensity of its prevalence relative to discrimination at the extensive margin. To address these concerns, we design a novel lab-in-the field experiment designed to identify types of discrimination practiced at the extensive as well as the intensive margin. We utilize a coordination game among Roma and non Roma adolescents to find that non Roma subjects practice discrimination towards the minority Roma participants. Importantly, we observe that non-Roma exert much higher rates of discrimination at the extensive margin relative to the intensive
margin. Our experiment allows us to conclude that animus/taste rather than statistical discrimination explains most of the observed behavior. These results suggest important differences in rates and type of discrimination between two key environments in the labour market.

Author(s): Utteeyo Dasgupta, Subha Mani, Joe Vecchi and Tomas Zelinsky


Working for Yourself

Nikolai Cook
University of Ottawa

ABSTRACT:

We examine whether the race and gender of potential managers affects a job applicant's decision when offered employment. A choice experiment finds that job offers featuring a white manager are chosen up to 13.4% more by whites. Offers featuring a black manager are chosen up to 20.7% more by blacks. We estimate that whites are willing to pay 0.9% to 1.6% of total wages for a white manager. Black respondents are willing to pay 1.7% to 2.0% of wages for a black manager. 20% of white respondents have an estimated willingness to pay exceeding 2% of total wages for a white manager. Preferences for manager gender are often insignificant. Job seekers display more extreme preferences.

Author(s): Nikolai Cook and Anthony Heyes


Coauthor Penalty - Evidence from the lab

Vegard Sjurseike Wiborg
University of Oslo, Department of Economics

ABSTRACT:

The large discrepancies in the fraction of male and female tenured academics have been subjected to a vast amount of research. Among the explanations of the male dominance are differences in preferences between men and women, structural conditions that favour men and mere discrimination. Within the field of economics, Sarsons (2017) assigns the disparity in promotions to tenured positions, to differences in recognition for joint work. Her findings suggest that male economists experience an equal raise in probability of promotion of writing an extra paper, independently of whether they collaborate on publications. Women attain the same increase in probability when publishing individually, but are substantially less credited for joint work. Similar analyses in sociology does not reveal the same coauthor penalty for women. This leads her to believe that the alphabetical order of coauthors in academic economics and ordering per contribution in sociology constitute the difference. We explore the notion of coauthor penalty and the role of alphabetical ordering of coauthors by reporting the results of a laboratory experiment. By letting the participants act as employers we study how experiment participants' hiring behaviour differ within and between information schemes. In part 1 of the experiment, the participants performed a series of mathematical quizzes. In each quiz, they were randomly assigned a partner. We did not provide them any information on their own score, their partners name or his/her score. On two occasions, in part 2 and 3, the participants were asked to choose partners based on information from part 1. In part 2, we showed each participant a table containing the names of four other subjects, the name of their partner in each quiz in part 1 and their joint score. That is, they did not observe the individual score of the four subjects. We provided some participants with tables where the pairs were ordered alphabetically (alphabetical treatment). The rest observed tables where each of the four subjects' pairs were listed according to who did best (first-author treatment). The best one was placed first. We asked them to choose two team members who would earn them money in the subsequent quiz. In part 3,
all the participants were shown similar tables as in the previous part, but could observe the four subjects' individual score in each quiz from part 1. We asked them to pick one team member for the following quiz. In the last part of the experiment they answered two questions: who did worst and who did best in the quiz in part 3? They were allowed to choose from three candidates. Results suggest that subjects consistently use performance variables when assessing candidates in part 2 and 3. There is no evidence of collaboration penalty for females. When information on performance is absent, the subjects make decisions independent of gender. Moreover, we find no evidence suggesting that females are less likely to be chosen relative to males in the alphabetical compared to the first-author treatment, controlling for available signals on performance. In both treatments, subjects seem to choose according to the score of the candidates and, in the first-author treatment, the number of times a candidate is listed first.

**Author(s):** Kjell Arne Brekke, Karine Nyborg, Vegard Sjurseike Wiborg  
**Topic:** Applied Economics: Labor Market, Games: Information

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### Gender bias in job referrals: An experimental test

Emmanuel Peterle  
Universite de Franche-Comte

**ABSTRACT:**

Employee referral programs, while efficient for the employer, have been shown to amplify sex-based occupational segregation in the labor markets. A common cause cited for this effect is gender homogeneity in employees' networks. We present evidence from a laboratory experiment designed to shed light on same-gender bias in job referrals within gender-balanced networks. We implement a simple 'referral game', where participants in the role of workers select coworkers out of a pool of designed candidates. Our data suggest that women tend to favor women in their referral choice, whereas men do not attach much importance to the gender of potential candidates. Our experimental design allows us to disentangle between statistical discrimination, preferences, and pure same-gender bias. Our findings add to the existing literature by highlighting that gender-balanced networks are not sufficient to ensure workforce diversity.

**Author(s):** Julie Beugnot and Emmanuel Peterle  
**Topic:** Applied Economics: Labor Market, Games: Networks

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### A market for honesty. An experiment on corruption in the education sector

Ivan Soraperra  
University of Amsterdam

**ABSTRACT:**

In the education sector, corruption is a major problem in large parts of Africa, Asia and South-America. Teachers often accept bribes from students who receive diplomas without serious effort. Students face a social dilemma: from the individual's perspective, it is attractive to offer a bribe. If all students offer a bribe however, the diploma becomes worthless. In this paper, we model the interaction between teachers and students and study two mechanisms to fight corruption in the education sector. A mechanism that is often used in practice is to enhance teachers' salaries. According to the fair salary hypothesis, teachers' bribery requests should diminish when they are paid a decent salary. As an alternative mechanism, we consider the possibility of offering teachers a piece rate based on the number of students attending their classroom. In this mechanism, teachers compete for students who vote with their feet. We test the predictions of the model in a lab experiment in Colombia, a country that is known to suffer from corruption. In agreement with the model, we observe a lot of corruption in the baseline without a mechanism. Introducing fair salaries to the teachers does not help diminishing their requests for corruption. Instead, introducing a piece rate substantially diminishes but does not eliminate requests for bribes. Our results show that by creating a market for honesty, the quality
Do you take it? Trade-off between wage and bribe

Milos Fisar
Faculty of Economics and Administration, Masaryk University

ABSTRACT:

Theory suggest that lower wages in public administration encourage higher level of bureaucratic corruption and that wage raise may act as an anti-corruption policy. Nevertheless, the empirical studies do not find a general confirmation for theoretical suggestions. We designed and conducted a laboratory experiment in which public servants with different wages given by their superior face bribes. Our results show that not only the low-wage or high-wage do drive the bribery decision of a public servant, but also a probability and size of punishment play important role in his bribery decision-making.

Embezzlement and Corruption

Jiri Spalek
Masaryk University

ABSTRACT:

Embezzlement corresponds to an intentional dishonest act, committed by individuals who misappropriate assets that were entrusted to them in order to monopolize or to steal them. Embezzlement can use several techniques such as falsification of records, emission of false bills, declaration of ghost employees or stealing money in cash. In political science, Green (1993) defines embezzlement as a 'theft-after-trust offense'. Embezzlement is one of the many forms of corruption besides bribing and extortion. In this current project we attempt to study the embezzlement of politicians who may misappropriate assets that were entrusted to them in order to steal them. Precisely we attempt to address three key issues: (i)To what extent does the process of assignment of politicians, either randomly or through elections is likely to affect the level of embezzlement. (ii)To what extent does transparency on the use of funds to finance a public good reduce embezzlement, and (iii)How are voting decisions but also embezzlement influenced by the opportunity given to politicians to manipulate information. To address our questions we design an experiment based on an embezzlement game. Our experiment consists of four different treatments. Each treatment consists of 20 identical periods. At the beginning of the experiment, groups of 10 participants are formed; each group is composed of two sub groups of 5 participants (called communities) including each 4 contributors and one politician. Roles (politician or contributors) are randomly assigned at the beginning of the experiment and each player keeps her role for the entire duration of the session.
Private information is at the heart of many economic activities. For decades, economists have assumed that individuals are willing to misreport private information if this maximizes their material payoff. We combine data from 90 experimental studies using the Fischbacher/Filmi-Heusi (2013) paradigm, and show that, amongst others, people lie surprisingly little. To provide an easy entry into this literature, we make all analyses available as interactive graphs on www.preferencesfortruthtelling.com. The graphs allow restricting the data, e.g., only to specific countries. The graphs also provide more information about the underlying studies and give direct links from the plots to the original papers.

Effects of Timing and Reference Frame of Feedback: Evidence from a Field Experiment in Secondary Schools

Valentin Wagner
University of Mainz

ABSTRACT:

Information about past performance has been found to sometimes improve and sometimes worsen subsequent performance. We hypothesize that two factors in particular might contribute to explaining this puzzle: which aspect of one’s past performance the information refers to and when the information is revealed. In a field experiment in secondary schools, students received information about their absolute rank in the last math exam (level feedback), their change in ranks between the second last and the last math exam (change feedback), or no feedback. Feedback was given either 1-3 days (early) or immediately before the final math exam of the semester (late). We find that level feedback and negative change feedback significantly improve outcomes in the final exam when given early but tend to decrease outcomes when given late. As our results show that feedback has positive effects on students’ belief in the effectiveness of their effort but negative effects on their emotions, we reason that when feedback is given late, negative emotional effects may dominate positive incentive effects of feedback.

Relative Feedback and Academic Performance -- A Field Experiment in Higher Education

Raphael Brade
University of Goettingen

ABSTRACT:

In a randomized field experiment we study the effects of relative performance feedback on the future performance of university students. We replicate the experiment with a second wave of students one year later and confirm the results. In both waves, we find that feedback on first semester performance increases performance in the subsequent semester when the feedback is positive. Using a regression discontinuity design, we show that the improved performance is
indeed due to the positive rather than negative nature of the feedback. Our data suggests that positive feedback can change behavior when it comes unexpected: First, we find that those who expected to perform below average benefit most from positive feedback. Second, the initial effect of positive feedback persists in the following semester but receiving positive feedback twice does not have an additional effect on performance.

**Author(s):** Raphael Brade; Oliver Himmler; Robert Jaeckle  
**Topic:** Applied Economics: Other, Field Experiments: General

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**Effects of Performance Transparency in a Mathematics E-Learning Application: Evidence from a Randomized Controlled Trial**

**Henning Mueller**  
NHH Bergen / Department of Economics

**ABSTRACT:**  
The diffusion of e-learning applications in primary schools is advancing fast. One key feature of e-learning applications is that they increase performance transparency which facilitates social comparison processes between pupils. Yet, the impact of these processes on pupils are not well understood. The goal of this study is to gain insights into the effect of performance transparency in e-learning applications on the skill formation process of primary school children - specifically on their motivation, learning outcomes, social behavior, and risk attitudes. We use a randomized controlled trial with 400 children in elementary schools to compare two e-learning applications for mathematics that differ with regard to their performance transparency. First results of our analysis reveal no difference between treatment and control group with respect to risk and social behavior but point to strong improvements for the subgroup of students with bad grades in math abilities and learning motivation. Our results will provide important insights for the role of performance transparency in skill formation processes and the development and usage of educational software in the classroom.

**Author(s):** Martin Huschens, Henning Mueller, Franz Rothlauf, Daniel Schunk  
**Topic:** Field Experiments: General, Applied Economics: Other

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**Relative performance feedback, effort and free riding in creative and repetitive team tasks**

**Andrea Isoni**  
University of Warwick

**ABSTRACT:**  
We conduct an experiment to study the effect of performance feedback incentives in creative and repetitive team tasks in which individuals benefit from free riding. Participants take part in a two-person real effort task repeated for eight three-minute periods. In every period, time can be allocated between team and individual production. Effort is rewarded with a piece rate for the total produced by the team, and a higher piece rate for the units produced individually. We compare team effort and performance in a 2 (creative vs. repetitive) by 2 (whether or not relative team performance information is provided) design. We find that less time is contributed to the team production in the intrinsically-rewarding creative task than in the repetitive task. Providing relative team performance feedback increases time contributions and team output in the creative task but has no effect on the repetitive task.

**Author(s):** Andrea Isoni, Dawn Eubanks  
**Topic:** Applied Economics: Labor Market, Games: Repeated Games
You Get What You Pay For: Evidence from a Jobseeker Conditional Cash Transfer Program in France

Anett John
CREST Paris

ABSTRACT:
Youth participation in programs designed to enhance their employability is usually low. This paper reports the results from a large randomized experiment in which young, unskilled jobseekers in France receive a monthly cash transfer for a two-year period totaling up to €4,800, conditional on their participation in the French national career guidance program. Cash transfers lead to a significant increase in program participation (which mainly entails meetings with counselors), and sharply reduced drop-out rates. As a result, there is a large increase in the job offers, vocational training and career building workshops proposed to the young jobseekers. However, the jobseekers' response to these increased opportunities for employability investment is a precisely estimated zero. Moreover, we observe a significant reduction in employment over the first six months and only a minor increase in income. The results point to a strong impact of financial incentives, but also to the need to design more sophisticated incentive schemes if the goal is to improve employability investments.

Author(s): Anett John, Bruno Crepon, Romain Aeberhardt, Vera Chiodi, Mathilde Gaini, Augustin Vicard

Complexity and the Effectiveness of Public Policy

Steffen Altmann
IZA and University of Bonn

ABSTRACT:
This paper studies how job seekers' understanding of labor market policy affects their search behavior and later labor market outcomes. We report the results of a large-scale field experiment in the Danish labor market, in which we exogenously vary individuals' understanding of the prevailing rules and incentives related to job search. Our experiment makes use of a web-based tool that reduces complexity for job seekers by providing them real-time personalized information about their current unemployment benefit situation as well as information about the most relevant rules regarding unemployment benefits, search requirements, and possible sanctions. We study the causal impact of our intervention in survey and administrative data containing comprehensive information on individuals' employment status and earnings.

Author(s): Steffen Altmann, Sofie Cairo, Robert Mahlstedt, Alexander Sebald
Topic: Applied Economics: Labor Market, N/A

Showing Life Opportunity: Increasing opportunity-driven entrepreneurship and STEM careers through online courses in schools.

Francisco Flores
Universitaet Kassel

ABSTRACT:
We plan to provide an RCT in Ecuador that aims to increase the number of opportunity-driven entrepreneurs and science, technology, engineering, and mathematics (STEM) careers through online courses in schools. Studies show that the training that focuses on kids have a positive effect on entrepreneurial related knowledge (Huber, Sloof and Van Praag, 2014; Moberg, 2014, 2017). Moreover, STEM courses increase pupils' performance (Means et al. 2009), and search theory suggests that having more options improve the quality of choice (Stigler, 1961; Lippman and McCall, 1976; Palley and Kremer, 2014). Therefore, we plan to expose students from 86 top-infrastructure schools (so-called Millennial Schools) both to STEM and Entrepreneurial online courses. We will target students at the age of 14 to 16 years old (~19,000 students), close to choosing their career path. We plan to assess the effect of the intervention after the courses and follow students after they finish high school to know the impact of the intervention in the short and long run. The experiment is part of a computational thinking program designed to improve ICT's domain on teachers. Thus, tutors will be able to mentor students in the operation of online platforms and supervise online courses. The intervention includes online courses on entrepreneurship, scientific methods, and standard curricula (placebo group). Moreover, we plan to provide interviews with scientist and entrepreneurs (role model part of intervention). First, the module on entrepreneurship covers basic concepts of (a) persuasion and negotiation skills and (b) basics of personal initiative (Campos et al., 2017). Second, the scientific method module is built around K-12 American Statistical Association guidelines for the grades 9-12 and K-12 Educate to Innovate guidelines. Third, the standard curricula module features online courses on Math and English to ensure a neutral learning environment in the placebo group. Finally, half of the subjects in each treatment arm will be exposed to role model videos since numerous laboratory (see for instance Asanov, 2016) and field evidence (Beaman, 2009, Ferrear et al., 2012) suggest that observation of others affects choice. The other half of students will receive videos from the National Educational Broadcast EducatTV. We plan to randomise at the school level. We use propensity score-based matching randomisation as suggested by Imai et al. (2009) to balance on a wide range of schools' characteristics. We plan to provide analysis at the level of pupils correcting for the method of randomisation (Imbens and Rubin, 2016). Meanwhile, for exploratory analysis and heterogeneous treatment effects, we plan to use machine learning techniques (Wager and Athey, 2015; Athey and Imbens, 2016). Since the program is implemented under the supervision of the Ministry of Education, we expect a high rate of compliance (>95%) and low rate of attrition (<1%) in the short run. For the long-term outcomes, the rate of attrition can reach more than 10%, but we aim to limit it by tracking students using contacts information, career intentions, migration plans, and providing incentives.

Author(s): Igor Asanov and Francisco Flores

Topic: Field Experiments: General, Applied Economics: Economic Development

Back to session: Evaluation of Social Programs
Immoral labor markets

Roberto Weber
University of Zurich

ABSTRACT:

There exists a widespread perception that heterogeneity in the moral characteristics of jobs and workers interact to produce differential selection by immoral individuals into jobs that require performing immoral acts. Moreover, the aversion among many individuals to performing such acts may contribute to immorality wage premiums, a form of compensating wage differential. However, the evidence of such relationships is limited and limited to correlational studies. We investigate the interaction between individuals' concerns for morality and their labor market outcomes using both laboratory experiments and surveys. We obtain two measures of an individual's aversion to performing immoral acts, one from a behavioral laboratory task and the other from a series of survey items; the two measures correlate significantly with each other. More importantly, these two measures also correlate with laboratory labor market outcomes and expected outcomes in real labor markets. In the laboratory, immoral types are more likely to be employed and obtain higher wages when a job requires performing immoral acts. In our survey data, immoral types express a greater willingness to work in firms and industries that other people rate as less moral.

Author(s): Fanny Brun, Florian H. Schneider, Roberto A. Weber

Fairness in markets: The role of transaction costs, quality, and donations

Benedikt Meyer-Bretschneider
HU Berlin

ABSTRACT:

Negative externalities are a primary reason for market failure due to selfish behavior. In contrast, this paper provides evidence that consumers in an incentive-compatible experimental product market are willing to pay a substantial price premium for products with less negative externalities, compared to products with more negative externalities. However, we also find that the price premium drops sharply when buying these products requires even small transaction costs, or when these products are of even slightly worse quality. The price premium, however, is unaffected by a simultaneous opportunity to donate against negative externalities. These findings support the notion that people dislike negative externalities of market exchanges, but that even small changes in the product or the market environment can lead to market failure.

Author(s): Benedikt Meyer-Bretschneider

An experiment on wage rigidity and fairness: Can real wage cuts bring flexibility to the labour market?

Essi Kujansuu
European University Institute

Topic: Field Experiments: General, Social Behavior: Communication
Back to session: Evaluation of Social Programs

Topic: Social Behavior: Other-regarding Preferences, Markets: Other
Back to session: Fairness in Markets

Topic: Social Behavior: Other-regarding Preferences, Markets: Industrial Organization
Back to session: Fairness in Markets
ABSTRACT:

Survey evidence indicates that 'real wage cuts' - cuts that keep nominal wages intact - are regarded as more acceptable than nominal wage cuts. Nominal cuts are generally perceived as unfair by workers and are shown in previous studies to have a negative impact on work motivation. Whether 'real wage cuts' have an equally adverse impact on work motivation as nominal wage cuts is a less studied but relevant question, in particular, to policy-makers and wage-setters when there is downward pressure for real wages. Using a labour market model with loss aversion, it is shown that when nominal wage is used as a reference point for fairness, 'real wage cuts' have weaker motivational effects than nominal wage cuts. Nominal downward wage rigidity arises consequently as firms refrain from direct wage cuts in fear of lower work motivation. Economic policy-makers do not, however, face such a stark labour productivity consequence to real wage cutting policies, for example, price inflation or currency depreciation, because the reference point is not violated.

To test this theory and to compare the effects of nominal and 'real' wage cuts on work motivation experimentally, the paper deploys a laboratory labour market experiment in which two kinds of wage cuts are possible: common 'real wage cuts' or individual nominal wage cuts. Work motivation is measured by performance in a real effort task. The experiment was held at BLESS laboratory of the University of Bologna in December 2017 and January 2018. The preliminary results indicate that motivation is dampened by nominal wage cuts, while 'real wage cuts' do not have a systematic effect on work motivation. This result supports the idea that downward wage rigidity is rooted on widely held behavioural heuristics such as loss aversion and highlights the potential that policy-makers have on bringing about downward wage adjustment.

Author(s): Essi Kujansuu

Reciprocity in Bilateral Trade?

Lars Freund
Max Planck Institute for Research on Collective Goods

ABSTRACT:

In this study we investigate experimentally the effect of reciprocal motives in bilateral trade situations. Based on the theoretical analysis by Bierbrauer and Netzer (2016) we compare in a controlled laboratory experiment implementation of social choice functions. In their article the authors challenge the robustness of well-established results in the literature against reciprocal motives. Although their motivation is based on previous experimental findings, there is currently no explicit empirical support for their theoretically results. In detail, we use the bilateral trade environment to test the predictability of their new solution concept, the Bayes Nash Fairness Equilibrium, in comparison to the Bayes Nash Equilibrium. Based on this solution concept we test whether implementation is possible in an indirect but not in a direct mechanism. An experimental contradiction to the revelation principle. Our design also allows for a contradiction of the Myerson-Satterthwaite Impossibility Theorem. Additionally, we investigate how the equilibrium strategy and beliefs affects agents subjective well-being.

Author(s): Lars Freund
Topic: Markets: Other, Social Behavior: Other-Regarding Preferences

Representative Leadership and Social Status: Experimental Evidence from Borneo

Nor Izzatina Abdul Aziz
School of Economics, University of East Anglia

ABSTRACT:
We report a lab-in-the-field experiment which investigated representative leadership - a form of leadership that is common in villagers in developing countries. The experiment used a modified public good game in which effort of one player (the 'representative') is complementary with the total contributions of the others. The experimental subjects were villagers recruited from Kayan tribe that have hierarchical social structure in rural Sarawak (Borneo), Malaysia. Subjects reported judgements of one another's relative status dimensions before representatives were chosen at random for the public good game. We found that representatives in general behaved prosocially, often at personal cost, to improve their group outcome. Although representatives were informed about other members' contributions before choosing how much effort to make, there was little correlation between contributions and effort. Villagers who were judged to have high status were more likely to provide effective representation and trust their representatives, indicating to presence of representation norms linked to social status.

Author(s): N. Izzatina Abdul Aziz, Abhijit Ramalingam, Robert Sugden

Reducing Air Pollution Through Behavioral Change of Woodstove Users: Evidence from an RCT in Valdivia, Chile

J Cristobal Ruiz-Tagle
University of Maryland

ABSTRACT:

There is a widespread problem of outdoor air pollution in cities in the central-south of Chile due to combustion of wood-fuel for heating. Most of the outdoor pollution filters indoors and constantly exposes the population to high levels of air pollution. By means of subsidies and command-and-control policies Chile's environmental authorities have pushed for a massive replacement of residential wood-stoves. By incorporating a state-of-the-art combustion technology, these new wood-stoves are supposed to considerably reduce pollution emissions (by 6 to 15 times as compared to the ones that are been replaced, according to lab tests). However, the actual pollution emissions of these new wood-stoves, in real world conditions, is not much different from that of those that are being replaced for. The design of these new wood-stoves allows for users to adjust the damper and choke the air flow in the combustion chamber. In that way they can save on wood-fuel expenditures. As a consequence, under real world conditions of the wood-fuel combustion process, these new wood-stoves emit about as much pollution as that of the old wood-stoves. To address this issue is that we designed a behavioral intervention consisting on providing information feedback to wood-stove users. By conducting a RCT, we provide selected households with a signage that informs users about the level of emissions of his/her wood-stove according to the current setting of the wood-stove's damper. Users subject to this intervention are free to use their wood-stove in any way they want, choking it to save on wood-fuel consumption, or increasing the flow of oxygen in the combustion chamber to reduce pollution emissions, and anywhere in between. However, with the information signage users know that any setting of the damper they chose is associated to a certain level of pollution emissions of their own wood-stoves. Preliminary (short-term) results suggest that pollution emissions can decrease by up to 75 percent as a result of a behavioral change induced by this information signage. This is largely explained by the non-linearity in the emission-damper relationship. A modest change away from fully choking the air flow in these wood-stoves explains the large reduction in pollution emissions found in preliminary results.

Author(s): J. Cristobal Ruiz-Tagle, Alejandra Schueftan
Link: https://drive.google.com/file/d/1bc54I8FXMXwEkLDBDgYGjEMy24Oq7FyM/view

Regulatory Stringency and Compliance Behavior in Common Pool Resource Game: Lab and Field Experiments
ABSTRACT:

This study compares the effect of different regulatory stringencies imposed in common pool resource game. The experiments are done in both lab and field. We found that in an environmental where enforcement is low, imposing a highly stringent regulation is not always the best strategy to manage a common pool resource. In fact, imposing a regulation of lower stringency or more relaxed but practicable regulation yields a more plausible outcome in terms of economic (individual payoff), social (compliance and payoff equality), and environmental (remaining resource) aspects. Low stringency regulation plays an important role in encouraging compliance behavior of subjects in the long run. Imposing high stringency regulation creates the highest payoff inequality among subjects. The results from lab and field experiments confirm the same pattern, despite the difference in magnitude. To conclude, we suggest that regulation imposed on a common-pool resource must be designed carefully. A more relaxed but practicable regulation might be a more plausible solution in the long run, especially when enforcement is low. The role of regulation in allowing people to realize the advantage of cooperation and encouraging cooperative behavior in the long run should not be undermined. This might be more important than the penalty imposed with regulation.

Author(s): Kanittha Tambunlertchai; Sittidaj Pongkijvorasin


Incumbency Dominance in Letters to the Editor: Field Experimental Evidence

Anna Kerkhof
University of Cologne

ABSTRACT:

This paper reports the results of a randomized field experiment conducted three weeks before the 2017 federal election in Germany. Four different versions of a letter to the editor were sent to all the German daily newspapers. The versions differed in the subject matter of the letter, the chancellor Angela Merkel versus the main challenger Martin Schulz, and in the evaluation of this subject, positive versus negative. The experiment was designed to test for three different types of media bias: political bias, negativity bias, and incumbency dominance. We find no political bias in the decisions to print letters, and no statistically significant negativity bias. We do observe incumbency dominance: letters about the chancellor were 40% more likely to be printed.

Author(s): Markus Dertwinkel-Kalt, Anna Kerkhof, and Johannes Munster

Topic: Field Experiments: General, Applied Economics: Other

Improving Educational Outcomes Through Goal Setting, Incentives, and Self-Help Groups: Experimental Evidence from Medellin, Colombia

Daniel Salicath
University of Cologne

ABSTRACT:

We conducted a field experiment with high school students in Medellin, Colombia to investigate whether interventions based on goal-setting, incentives, and self-help groups could improve students' educational outcomes. This model focuses on helping individuals overcome internal constraints to personal development such as self-control, impatience
and under-confidence. Inspired by the practitioner-developed Family Independence Initiative and in collaboration with the Secretary of Education, we randomly assigned six treatment conditions to different classrooms/experimental groups that met every other week for five months. Our findings show that even an inexpensive intervention such as goal-setting could significantly help students achieve higher educational outcomes. Small monetary incentives were the most effective in increasing academic performance, although self-help groups also helped. The combination of all three instruments was the most effective approach and lead to a higher average grade and an increase in the likelihood of achieving an educational goal by 41% compared to setting a goal alone.

Author(s): Alessandra Cassar, Daniel Salicath, and Theodore Wisinski

Topic: Field Experiments: General, N/A

The long lasting effects of political violence on risk preferences

Marco Castillo
Texas A&M University

ABSTRACT:

Using a random sample of over 9,000 poor Peruvians, we show that those exposed to political violence in utero and during early childhood are significantly less risk averse in adulthood. The effect is very large: being exposed to violence can decrease the coefficients of risk aversion by 0.4SD. Violence prior to conception affects height, BMI and preferences, suggesting that part of the effect is mediated by the mother's health at the time of conception. We find no long-term effect of political violence on risk preferences when violence was experience during mid-childhood or adulthood. We further test the effect of birth conditions on preferences by inspecting the risk preferences of a random sample of Peruvian children for whom we have experimental measures and longitudinal data. We find that children who are in the lowest quintile of the weight or height distribution are less risk averse at 8 years of age even controlling for contemporaneous health and cognitive development as well as mother's physical, socio-economic characteristics and the birthweight of a younger sibling. The effects are also large (0.15SD-0.24SD). This suggests a link between biology and economic preferences.

Author(s): Marco Castillo (Texas A&M), Ragan Petrie (Texas A&M) and Maximo Torero (Worldbank)

Topic: Field Experiments: General, Applied Economics: Other

Discrimination Against Entrepreneurs and Ethnic Minorities in the labour market: Field Experiment in Russia.

Maria Mavlikeeva
Universitaet Kassel

ABSTRACT:

Entrepreneurs stay in business despite lower initial earnings, slower growth of income than in paid employment, higher risks and more working hours (Hamilton et al., 2000; Moskowitz and Vissing-Jorgensen, 2002; Astebro et al., 2004). This puzzling behavior is commonly explained by nonpecuniary taste-based factors like preferences for autonomy or control (see for review Astebro et al., 2014). Though specific preferences, of course, play a role, self-employees can be involuntary locked-in in their activity since prospective employers could prefer candidates with corporate experience. Little, however, is known if entrepreneurial discrimination exists and if yes, why? Is it taste-based discrimination (Becker, 1971) or statistical one (Phelps, 1972; Arrow, 1973)? We provide correspondence experiment (Bertrand and Mullainathan, 2004) in Russia to answer his questions. Specifically, we try to understand (1) if entrepreneurial discrimination exists; (2) if it exists, is it statistical or taste based; (3) if providing goal for applying can reduce the level
of discrimination. In addition, we measure the level of discrimination against migrants (ethnic minorities) at the Russian labour market. Surprisingly, this theme is understudied in Russia (Bertrand and Duflo, 2016), despite the fact that Russia has one of the largest number of immigrants (Bessudnov, 2016). We send 12660 fictitious resumes in response to 3165 real job advertisements in Russia and measure the rate of call-backs as an indicator of interest in the applicant. To elicit discrimination towards entrepreneurs we send comparable CV’s, except that we randomly assign if a person was self-employed or worked for a company. To assess if the entrepreneurial discrimination is statistically based, we apply for the occupations with different skill-levels: high or low skill level jobs according to International Standard Classification of Occupations (2008). We also assess racial discrimination randomly assigning the Slavic and ethnic minorities sounding names to the resumes with equal quality. To address Heckman critique (Heckman, 1998) of correspondence studies and increase the external validity of the experiment, we also randomly vary other characteristics of CV (including gender, work experience). We follow Lahey's and Lahey's (2016) methodological standards of correspondence study including randomly generated CV with the variability of all parts, registered pre-analysis plans, power analysis etc. Preliminary results indicate that both types of discrimination are to be observed in the Russian labour market. The level of ethnic discrimination is comparable to the level of discrimination in other countries (Zschirnt and Ruedin, 2016; Bertrand and Duflo, 2016). We refute that entrepreneurial discrimination has simple statistical nature (Phelps, 1972; Arrow, 1973), but it rather can be explained by multitask theory of entrepreneurship (Lazear, 2005) and labour frictions that induce mismatches between firms and workers (Astebro et al., 2011). Finally, the study brings important policy-related message explaining the high rate of self-employment among migrants e.g Xavier et al. (2012): Ethnic-minorities get into the vicious circle of discrimination at the labour market by choosing self-employment to avoid it.

Author(s): Maria Mavlikeeva and Igor Asanov
Topic: Field Experiments: General, Applied Economics: Labor Market

The shadow of the future: How do rising sea levels affect pro-social and risk preferences?
Experimental evidence from Solomon Islands

Ivo Steimanis
Philipps University Marburg

ABSTRACT:
In this paper we examine how individual pro-social and risk preferences respond to a vanishing shadow of the future and decreased possibilities of future interactions due to rising sea levels. To analyze if and how these preferences change with the prospect of being severely affected, we conducted a series of incentivized lab-in-the-field experiments and standardized surveys on risk perceptions. Our sample consists of 470 Solomon Islanders from low lying atolls, higher lying islands and migrants from atolls. They mainly differ in their risk exposure due to differences in their expected exogenously determined impacts of sea level rise. Additionally, we introduce an experimental treatment, an information video that increases the saliency of the impacts of rising sea levels, to study the causal effects of exposure on preferences. Our results show that preferences between samples do not differ on average. Only in the experimental treatments, we find that people from the relatively low exposed sample, respond to the new information by becoming more pro-social towards the out-group and more risk averse. We do not find these effects for people living on the low-lying island nor the ones that already migrated away from there. One possible explanation could be that these people even overestimate the impacts from sea level rise, as our survey data on risk perceptions suggests.

Author(s): Ivo Steimanis, Bjoern Vollan
Topic: Field Experiments: General, N/A
Link: https://www.uni-marburg.de/fb02/sustuse

On the Role of Commitment and Two-Part Tariffs in Credence Good Markets - An
Experimental Study in Behavioral Mechanism Design

Ben Greiner
Wirtschaftsuniversitaet Wien

ABSTRACT:

Health care markets are plagued by physicians' incentives to overtreat patients who cannot verify whether the treatment they received was appropriate. Dulleck and Kerschbamer (2006) derive the result that when a credence good is verifiable and consumers are committed to take up whatever treatment is prescribed, then in equilibrium we should observe honest treatment prescriptions and an efficient market. Fong, Liu and Wright (2014) point out that this result does not hold anymore when patients are able to reject a prescribed treatment. Wright (2013) proposes the use of a two-part tariff to fix this problem and restore the possibility of honest and efficient treatment in equilibrium. We fully develop the theoretical argument for a two-part tariff and subject these theoretical conjectures to an experimental laboratory test. In particular, we investigate whether dropping the commitment assumption leads to less honesty and lower efficiency in a credence good market, and whether a two-part tariff (which allows to charge separately for diagnosis) can alleviate this problem. We neither find a negative effect of dropping the commitment requirement nor that two-part tariffs would increase honesty or efficiency. The main reason is that people do not play the (sophisticated) honesty equilibrium in the first place, such that whether patients are committed to treatment or not plays a minor role.

Author(s): Ben Greiner and Le Zhang
Topic: Applied Economics: Other, Social Behavior: Lying and Cheating

Introducing and Terminating External Incentives: A Field Experimental Study of Forest Conservation as a Common-Pool Resource Dilemma

Christian Hoenow
University of Marburg

ABSTRACT:

The aim of this study is to analyze whether external institutional incentives have a lasting effect on conservation that persists even after incentives are terminated. We set up a forestry-framed Common-Pool-Resource Game in Namibia and introduced positive(reward) and negative(penalty) incentives. The participants in the game were small-scale farmers and they had to make decisions about either clearing new fields in the forest or staying on their old ones, which resembles decisions they make in real life. The game is played over several periods and the incentives are ceased after some time to test for persisting effects in a post-incentive period. Results show that the manifestation of lasting effects depends on the particular type of incentive. Results from this research should help policymakers when considering the introduction of incentives, in particular when a potential policy might only be maintained for a limited period of time, for example due to financing restrictions.

Author(s): Hoenow, Christian ; Kirk,Michael
Topic: Field Experiments: General, Social Behavior: Group Behavior
Link: https://www.uni-marburg.de/fb02/ike/mitarbeiter/terminationdraft.pdf

Punishment Patterns, Trust, and Traumatization among Syrian Civil War Victims in Syria : A Field Experiment

Andreas Nicklisch
Hochschule fur Wirtschaft und Technik
ABSTRACT:
Since 2011, a brutal civil war takes place in Syria. An uncounted number of people is internally displaced or flees the country. The vast majority of people experiences severe violence on a daily basis. We ran a series of lab-in-the-field experiments with Syrians in Syria, both on the rebel's side and on the government side. We test their trust, pro-social, and cooperative behavior in investment games, sequential prisoners' dilemmas and modified ultimatum games. We identify unusual punishment schemes responding to breaches of pro-sociality and cooperativeness. Those schemes are more likely to appear the more traumatized participants are and the more they witnessed serious punishment during the civil war.

Author(s): Elisa Fraile Aranda, Nora El-Bialy, Andreas Nicklisch, Lamis Saleh, Stefan Voigt
Topic: Field Experiments: General, Social Behavior: Norms and Morals

Earning more tomorrow: Overconfident income expectations and consumer indebtedness

Antonia Grohmann
DIW Berlin

ABSTRACT:
This paper examines whether biased income expectations due to overconfidence lead to higher levels of debt-taking. In a lab experiment, we exogenously manipulate income expectations of participants by letting income depend on relative performance in hard and easy quiz tasks, thereby exploiting the so called hard-easy gap. Before participants engage in the quiz task, they can purchase goods by borrowing against their future income. We successfully generate biased income expectations and are able to show that subjects with higher income expectations initially borrow more. Receiving feedback on their true income, overconfident participants scale back their consumption in following periods. However, at the end of the experiments they remain with higher debt levels.

Author(s): Antonia Grohmann, Lukas Menkhoff, Christoph Merkle, Renke Schmacker
Topic: Markets: Finance, Decision Theory: Beliefs

Skewness expectations and portfolio choice

Matthias Wibral
Maastricht University

ABSTRACT:
Many models of investor behavior posit that investors prefer assets with a positively skewed, lottery-like return distribution. As future returns are uncertain, investors have to form a probabilistic expectation about their distribution. We use experiments with a large representative sample of the Dutch population to study skewness in return expectations for two risky assets and relate it to portfolio choice. Respondents' expectations for the return distributions are very heterogeneous and poorly calibrated compared to historical values. In a complementary investment task, respondents' investments increase with the skewness of the expected return distribution for each of the two assets. For the asset with more temporal variation in skewness expectations, we also find a positive relation between changes in expected skewness and changes in respondents' positions. Both in the cross-section and over time, individual investors' behavior is consistent with the predictions of models that propose a preference for skewness.

Author(s): Tilman Drerup and Matthias Wibral
Topic: Decision Theory: Risk, Markets: Finance

**Effect of Tobin Tax in an Experimental Financial Market**

Dipyaman Sanyal  
Jawaharlal Nehru University

**ABSTRACT:**

We run a 40-period experimental session of the Minority Game with 143 subjects and introduce a Tobin Tax after 20 periods of the game. We find that the subjects in the experiment choose to trade less often after the imposition of the tax. We also find that there is a reduction in excess demand after the tax is introduced and a decrease in volatility, but with limited impact on prices. Our experimental findings are mostly in line with a simulated model developed by Bianconi et al (2009) where the authors find that 'the introduction of Tobin taxes in agent-based models of currency markets can lead to a reduction of both speculative trading and the magnitude of exchange rate fluctuations'. The results have significant policy implications for speculative asset markets especially as a financial transactions tax is being debated by the EU.

**Author(s):** Dipyaman Sanyal  
**Topic:** Markets: Finance, N/A

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**The more you trade, the less you earn? An experimental study**

Tomas Miklanek  
University of Economics, Prague

**ABSTRACT:**

This paper examines the relationship between the frequency of trading and achieved profits in the continuous double auction asset markets. There are mixed theoretical predictions about this relationship followed by the similarly mixed empirical evidence. With our approach we try to look at the effect of trading activity on the profits in a very simple experimental market with one asset and no uncertainty about the fundamental value. We use measures of willingness to speculate, cognitive abilities, willingness to compete, and risk attitude as instruments for trading activity. We find negative effect of predicted trading activity on the trading profits. Willingness to speculate seems to be the channel responsible for this relationship.

**Author(s):** Miklanek Tomas, Zajicek Miroslav  
**Topic:** Markets: Finance, N/A

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**The Effect of Futures Markets on the Price Dynamics in Commodity Markets**

Johan de Jong  
University of Amsterdam

**ABSTRACT:**

Do futures markets have a stabilizing or destabilizing effect on commodity prices? Empirical evidence suggests that both effects are possible (e.g. Working, 1960; Roll, 1984). We investigate this question further using a learning-to-forecast experiment with two coupled markets: a commodity market and a futures market. The first exhibits negative feedback between forecasts and prices, associated with stable prices, while the second market is of the positive feedback type. The experiment is currently in progress. Based on our results, futures markets may have a stabilizing effect on commodity prices under certain conditions.
type, which makes it susceptible to bubbles and crashes. The experiment is currently in progress. Based on our simulations and stability analysis we expect that a futures market has a stabilizing effect on prices in the commodity market when these two markets are weakly coupled, but that this turns into a destabilizing effect when the size and influence of the futures market increase.

Author(s): Johan de Jong, Joep Sonnemans, Jan Tuinstra
Topic: Markets: Finance, Markets: Other
Back to session: Financial Markets 2

Algorithm Aversion in Financial Investing

Christoph Merkle
Kuhne Logistics University

ABSTRACT:
Increasing digitalization and automation of processes in all parts of society raises the question whether humans are willing to rely on algorithms. In several domains it has been shown that humans prefer to tie their incentives to predictions made by a human rather than an algorithm, even if the latter performs better. Additionally, participants are quicker to lose confidence in the algorithm than the human once they observe an error. We experimentally test whether this algorithm aversion is also present in financial decisions. Participants select to invest either with a human fund manager or an algorithm and then observe the choices and outcomes for both intermediaries. We analyze whether they prefer either type beyond what is justified by differences in performance.

Author(s): Maximilian Germann, Christoph Merkle
Topic: Markets: Finance, Decision Theory: Preferences
Back to session: Financial Markets 2

Experiments in High-Frequency Trading: the Continuous Double Auction versus the Frequent Batch Auction

Kristian Lopez Vargas
University of California, Santa Cruz

ABSTRACT:
Using laboratory experiments, we compare two leading financial market formats in the presence of high-frequency trading (HFT): the Continuous Double Auction (CDA), also known as continuous limit order book, which organizes trade in the majority of equities, futures and currency exchanges around the world, and the Frequent Batch Auction (FBA), which gives equal time priority to orders received within a short batching period. Our evidence suggests that, relative to the CDA, the FBA reduces predatory trading behavior and disincentivizes investment in low-latency messaging technology. Transaction costs (namely, mean market spreads) are lower in the FBA compared to the CDA. Volatility, both in market spreads as well as in liquidity, is also higher in CDA compared to the FBA.

Author(s): Eric Aldrich and Kristian Lopez-Vargas
Topic: Markets: Finance, Markets: Auctions
Back to session: Financial Markets 2

An Experiment on Market Reaction to Fundamental Value Shocks

Wael Bousselmi
ABSTRACT:

We provide experimental evidence about the impact of expected fundamental value (FV) shocks on prices and volumes. The benchmark treatment involves a constant FV as in Noussair et al. (2001). In our test treatments we either implement two consecutive upwards shocks (UU) or two consecutive downwards shocks (DD). Subjects are aware of the possibility of new information being communicated to them. However, they have no clue about the content of this information, i.e. the possible changes in FV and the timing of arrival of new information. In the two test treatments (UU and DD) the shocks were implemented in the same periods. Subjects received a message announcing the new FV. We performed 18 experimental markets: 4 baseline markets and 14 test markets (7 for each treatment). Our main findings are as follows. Mispricing arises in almost all markets, with and without FV shocks. In the DD treatment shocks lower the trading volume, the price volatility and increase the price deviation. In the UU treatment shocks do not affect the trading volume nor the price volatility, but lower the price deviation. These findings suggest that the presence of multiple downward shocks tends to increase the amplitude of the mispricing while the presence of multiple upward shocks tends to reduce the amplitude of the mispricing. We also observe a positive relation between the difference of opinion (based on elicited beliefs about future prices) and the volume of transactions in the baseline and the DD treatments. This relation is negative in the UU treatment. Keywords: Experimental asset market, price volatility, price bubble and risk aversion

Author(s): Wael Bousselmi, Patrick Sentis and Marc Willinger

Topic: Markets: Finance, N/A

Back to session: Financial Markets 2

Don't Tell Me What I Already (Don't) Know. Avoidance of Information on Unhealthy Food.

Felix Schmidt
Gutenberg-University Mainz

ABSTRACT:

Using a laboratory experiment we investigate who avoids valuable nutritional information and why. We present evidence that information on the negative health effects of sugar sweetened beverage consumption are especially avoided by the participants with a high sugar sweetened beverage consumption. They have a 22.5 percentage points higher probability to avoid information on the negative effects of sugar sweetened beverage consumption compared to participants with low consumption. By exogenously varying the novelty of avoidable information we investigate the content and reminder property of information as the motive for avoidance behavior. We show that avoidance behavior of the target group is mainly driven by the motive not to learn more about the negative consequences of current behavior (content avoidance) and less so by the motive not to be reminded about facts already known (reminder avoidance). Effects are especially pronounced for individuals with little nutritional knowledge. Overall, our results are in line with the idea that knowledge gaps are maintained by avoiding new information in order to proceed with current behavior.

Author(s): Felix Schmidt

Topic: Applied Economics: Other, Games: Information

Back to session: Framing and Advertising

Scarcity and Exchange Asymmetries: Evidence from Small-Scale Farmers in Rural Zambia

Dietmar Fehr
University of Heidelberg

ABSTRACT:
Substantial gaps between individual willingness to pay and willingness to accept have often referred to as exchange asymmetries have been demonstrated in a multitude of laboratory studies. Most of this evidence is based on student populations who take decisions over generally very similar low-value items. In this paper, we test the robustness of these exchange asymmetries in a population of small-scale farmers in rural Zambia, who we asked to make decisions over relatively high value items over a period of 18 months. Using a total of 5,408 decision experiments, we show that exchange asymmetries are almost universally present and remarkably robust to changes in procedures and item pairs. Farmers are on average about 15 percentage points more likely to end up with an initially assigned item relative to the free choice condition. We also find that the magnitude of the effect depends on the relative value of item pairs, with both seasonal resource scarcity and higher value items pairs increasing trading probabilities. On the other hand, we do not find any evidence for experience, conceptual understanding, duration of item ownership, expectations or experimenter demand modifying the observed exchange asymmetries.

Author(s): Dietmar Fehr, Guenther Fink, Kelsey Jack
Topic: Field Experiments: General, Applied Economics: Economic Development

Creativity and Framed Incentives

Marco Kleine
Max Planck Institute for Innovation and Competition

ABSTRACT:
We study the effect of gain- and loss-framed incentives on creative performance and further compare it to performance without monetary incentives. In a laboratory experiment with more than 400 subjects, we apply a prominent paradigm on creative problem solving: the candle problem (Duncker, 1945). Compared to gain frames, framing incentives as losses neither helps nor hurts having the creative idea. This calls into question whether the positive link between loss-framed incentives and performance, as established for routine work, also holds for creativity. Moreover, we find some evidence that monetary incentives per se reduce performance in creative problem solving.

Author(s): Marco Kleine
Topic: Applied Economics: Labor Market, N/A

Measuring the Effects of Audio Advertising: Results from a Field Experiment on Pandora

David Reiley
Pandora Media, Inc.

ABSTRACT:
How effective is audio advertising at obtaining consumers' attention and influencing their behavior? Recent digital experiments have successfully measured the effects of online search and display advertising. Before running this new experiment, we hypothesized that audio advertising would garner much more consumer attention than display advertising, as the in-stream nature of an audio ad on a music station makes it much harder to ignore than a graphical ad. However, to date we have very little evidence about the effects of audio advertising, as broadcast radio advertising does not enable researchers to randomize at the individual level. In this study, we take advantage of a unique opportunity to measure the effects of audio advertising on Pandora Internet Radio via a randomized experiment that tests several different creatives against each other versus a control group who received placebo ads. This may be the largest single advertising effectiveness case study to date, as our experiment exposed over fifteen million subjects to ads and recorded their behavioral outcomes. Not only do we find significant effects of the audio ads on a desired consumer behavior, we also have enough statistical power to show that ad creatives with sound effects perform 30% better than equivalent
creatives without sound effects. We further find that the effects of the ads persist for approximately three weeks after the end of our 4-week campaign, and that these post-campaign effects represent approximately 25% of the total impact on consumers. Finally, we show that a common attribution model (last-touch attribution), used to measure the impact of advertising with observational data, underestimates the causal effects of our experimental audio ads by a factor of three.

**Author(s):** David Reiley, Zhen Zhu  
**Topic:** Field Experiments: General, Markets: Industrial Organization  
**Back to session:** Framing and Advertising

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### The persistent nature of naivety about hidden information: An experimental investigation

**Jesal Dilip Sheth**  
**University of Nottingham**

**ABSTRACT:**

The unravelling prediction of the disclosure theory relies on the idea that market forces lead firms (information senders) to voluntarily disclose information about the quality of their products provided the information disclosed is verifiable and the costs of disclosure are negligible. This theoretical prediction requires that consumers (information receivers) hold correct beliefs and, in equilibrium, treat all non-disclosed information with extreme scepticism. Previous research finds that receivers are insufficiently sceptical, or in other words, are naive, about non-disclosed information, which leads to the failure of the unravelling prediction. This paper examines whether strategic naivety persists when realistic elements are introduced in the experimental setting - like consulting with another receiver, and introducing a restaurant food hygiene rating context. The main finding of this paper is that receivers who consult and those who are not given the opportunity to consult do not form significantly different inferences about non-disclosed information, and naivety in beliefs persists despite consultation. In addition, the extent of naivety in 'context-free'and 'in-context' experiments is not significantly different, and introducing a context does not lead to different beliefs compared to abstract, context-free experiments. In general, the paper finds that strategic naivety is a persistent and robust phenomenon, and neither consultation nor context reduce it.

**Author(s):** Jesal D. Sheth  
**Topic:** Games: Information, Markets: Industrial Organization  
**Back to session:** Games and Markets

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### Matching under Imperfect Information: An Experimental Study

**Jacopo Magnani**  
**New York University Abu Dhabi**

**ABSTRACT:**

In marriage and labor markets, information about the attributes of the parties involved is often private. Thus, optimal matching decisions require agents to engage in sophisticated strategic thinking. In this paper we use a laboratory experiment to study matching under imperfect information. We analyze subjects' behavior in a game where being accepted confers bad news about a potential partner's type. We find that medium types propose to form matches when Bayes-Nash equilibrium predicts they should not. This behavior is consistent with a cursed equilibrium model in which medium types fail to understand adverse selection and thus overestimate the value of matching. We propose a series of treatments to rule out alternative explanations.

**Author(s):** Jacopo Magnani, Olivier Bochet  
**Topic:** Games: Information, Markets: Market design and Matching  
**Back to session:** Games and Markets
Adoption and Abandonment of Decision-Making Principles: Evidence from Cournot Experiments

Peiran Jiao
Maastricht University

ABSTRACT:
We conducted a controlled laboratory experiment to understand how and what kind of information triggers adoption and abandonment of different decision-making principles in games. We consider three types of decision-making principles: best-response, payoff-based learning, and imitation. Our focus is on Cournot contests, where Nash equilibrium is located between social optimum and social pessimum. Subjects start in a low-information environment, where only payoff-based learning is feasible, and end up with full information, where all types of decision-making rules apply. Treatments vary with respect to the order with which information is revealed as the game is repeated. Our study is designed to address three main questions. (1) The 'marginal' effect of information: Which new bits of information trigger which principle? (2) The 'additive' effect: How does the history of previously available information affect (1)? (3) The 'substitution' effect: How are decision-making principles abandoned and adopted? Thus, we establish a novel link from micro-heuristics to various resulting macro-dynamics of play, which converge either toward Nash equilibrium or toward a socially inferior zero-profit outcome.

Author(s): Peiran Jiao, Heinrich Nax
Topic: Games: Information, N/A
Link: https://ssrn.com/abstract=3053958
Back to session: Games and Markets

Information-processing styles in the presence of abundant information: An experimental analysis

Alexander Neverov
Institute of PsychoEconomic Researches

ABSTRACT:
Information processing is an important topic in theoretical and experimental economics. One of the questions that has not received much attention in the literature so far is how in the presence of abundance of information, people decide on which parts of the information to focus. To explore this issue, we developed a platform with an economy that involves twenty economic agents who interact by buying and selling five different goods. Each good had three different quality levels, each with its own price. We conducted ten experimental sessions. Each session involved twenty subjects playing ten periods of the game. The subjects received full information about all previous periods, including prices, endowments of the goods and of money of all subjects, and all decisions made by themselves and other subjects in the previous rounds. The subjects made decisions about buying and selling the different goods in each of the ten periods. These decisions determined the supply and demand functions and the equilibrium prices in each period. After each period, the subjects were asked to write how they made their decisions, what information they were considering, etc. We analyzed their responses to see what parts of the information they were focusing on, looking for example at which variables they focused on, how many previous periods they considered, etc. We observe heterogeneity in subjects' information-processing styles and identify seven main types of information-processing styles. Some subjects were considering mostly the previous prices, others were focusing on the buying and selling decisions made by other subjects in previous rounds, etc.

Author(s): Neverov A., Markelov A., Golubev F., Kapev R.
Topic: Games: Information, Markets: Other
Back to session: Games and Markets
Motherhood and the willingness to compete

Nikos Nikiforakis
New York University Abu Dhabi

ABSTRACT:
The willingness of women to compete has been a topic of continuing interest since the publication of Darwin's 'The Descent of Man'. Evolutionary theories argue that women become less competitive after they become pregnant. This is in line with the observation that a large part of the gender gap in labor market outcomes is due to motherhood. We present evidence from the first experimental test of this hypothesis. We compare the willingness of parous women (i.e., mothers or pregnant women) and nulliparous women to select into competition. We employ a sample of university students in which a high fraction of women are either mothers or pregnant, which allows us to compare women who are otherwise at similar stages in their lives and from similar socio-economic backgrounds. In line with evolutionary theories, the evidence indicates that nulliparous women are nearly 70 percent more likely to select into competition than parous women. We discuss reasons for this finding and policy implications.

Author(s): Aurelie Dariel, Curtis Kephart, Nikos Nikiforakis and Christina Zenker
Topic: Psychology and Biology: Gender and Individual Differences, N/A

'It Takes Two: Gender differences in in group work.'

Siri Isaksson
Stockholm School of Economics/Harvard University

ABSTRACT:
This study tests for gender differences in credit claimed for individual contributions in group work. I introduce a novel experimental framework where two subjects work together on solving a computerized puzzle. Subjects are shown a photo of their partner. After each puzzle, they are asked to estimate their contributions towards the solution in incentivized questions. No strong support for gender differences in claiming credit is found. When considering performance and success, I find that mixed teams perform worse than all male teams. This seems to stem from the fact that males have lower individual performance when partnered with a woman. Men are also more likely than women to correct their partner. In total, 248 subjects participate in the experiment and play eight rounds with different partners and puzzles.

Author(s): Siri Isaksson
Back to session: Gender 1: Competitiveness

Does it matter who is judging? Gender and Preferences for Competition

Sandra Bedenk
Universitaet Potsdam

ABSTRACT:
Experimental studies indicate that gender differences in preferences for competition provide an explanation for persisting differences in labor market outcome and that competitive behavior may be influenced by external factors, such as prevalent gender roles or the competitor's gender. I use a laboratory experiment to investigate whether there are
systematic differences in women's choice to select into a competition due to the gender of those who execute rules and evaluate performances. One part of a group of participants is asked to solve a real effort task, whereas the other group member's assignment is to validate the other's answers according to given criteria. The participants receive information about the gender of their evaluators and their competitors. Following the experimental design of Niederle and Vesterlund (2007), in the first round there is a noncompetitive piece rate payment scheme and in the second round a competitive incentive scheme in effect. In the third round, participants decide on a combination of both compensation schemes. I find that female participants are more hesitant to enter a competition, if evaluated by male participants. I find no effects of the group's gender composition on female participants' tournament entry decision. I argue that possible differences in selecting into competition provide an explanation not only for vertical but also for horizontal job segregation: Women may choose careers in branches, where women are more likely to be involved in recruitment processes or to be future superiors.

Author(s): Sandra Bedenk

Topic: Psychology and Biology: Gender and Individual Differences, Decision Theory: Preferences

Gender, Culture, and Competition

Noah Bacine
Texas A&M

ABSTRACT:

Niederle and Vesterlund (2007) investigate gender differences in competitiveness, and their results reveal that independent of performance, men opt for a tournament pay structure twice as often. This result has been replicated numerous times with a variety of populations, consisting mostly of college students. Others such as Gneezy, Leonard and List (2009) have sought out cultural differences by taking the lab far into the field, and have found that villagers in matrilineal cultures exhibit the reverse result. Expanding on this work, we investigate potential cultural variation in the gender gap in competitiveness by replicating the procedures of Niederle and Vesterlund (2007) with two novel US college student populations: Hispanic students at a predominantly white university and black students at a nearby historically black university. Our results echo those of the field experimenters. We find that the Hispanic population mirrors that of the original study: Hispanic men select the tournament almost twice as often as Hispanic women even though there is no gender gap in performance. On the other hand, black men and women enter competition at similar rates resulting in no gender gap in competitive preferences. Cultural differences such as parental education and the occurrence of female-headed single parent households correlate with, and may explain, the gender gap in competitive preferences.

Author(s): Noah Bacine, Gbenga Ojumu, Catherine Eckel, Romaine Knight, Nathaniel Mezgebe, Shea Niswanger, Bethany Patterson, Rebekah Preston, Matthew VanDivier, Antoinette Williams

Topic: Psychology and Biology: Gender and Individual Differences, Decision Theory: Preferences

Competing by Default: A New Way to Break the Glass Ceiling

Lata Gangadharan
Monash University

ABSTRACT:

Leadership selection in organizations often requires candidates to actively choose to participate in the competition. We conjecture that such an Opt-in mechanism may contribute to the gender gap observed in leadership positions. We design an Opt-out mechanism where the default is to compete for a leadership position and individuals can opt out of the competition. Data from our experiments show that women are more likely to compete for leadership positions under the
Opt-out mechanism and this effectively reduces the gender gap in competition. When given a choice between the Opt-in and Opt-out mechanisms, individuals are equally likely to choose either one. We conclude that the Opt-out mechanism can be an effective and feasible way to break the glass ceiling.

Author(s): Nisvan Erkal, Lata Gangadharan, and Erte Xiao
Topic: Psychology and Biology: Gender and Individual Differences, Games: Contests

*Un)willing to lead? An experimental study on gender and leadership*

Ananish Chaudhuri
University of Auckland

ABSTRACT:

This study is aimed at exploring two issues: (1) are there systematic gender differences in the willingness to lead and (2) do messages from male and female leaders ' even where the content of the message is identical ' have different impact on the actions of followers? In order to study this issue, we rely on a modified version of the Brandts and Cooper (2006, 2007a, 2007b) minimum effort game. Each one of multiple treatments consists of 20 rounds with the first ten rounds being identical. Participants are randomly assigned to groups of five, whose composition remains unchanged for the entire time. In each round, each participant is asked to choose an effort level \{0, 10, 20, 30, or 40\}, where earnings depend on the participant's effort choice and the minimum effort level chosen in the group in that round. Prior to the start of round 11, participants are given an opportunity to volunteer to be the group leader. If more than one person wishes to be a leader, then the leader is chosen randomly from the group of contenders. The pay-off structure to the followers remains unchanged. However, the payoff to the leader changes, such that the leader is better off than a group member if the group manages to coordinate to effort levels of 30 or 40 but if not then then the leader's payoff is less than what the group members earn. We vary the experimental design along two dimensions: (1) whether the gender of the leader is revealed or not and (2) whether the leader sends a FIXED message, that is provided by the experimenter or the leader is allowed to write FREE-FORM messages. This implies a 2X2 design. (1) Gender not revealed, FIXED message; (2) Gender revealed, FIXED message; (3) Gender not revealed, FREE-FORM message and (4) Gender revealed, FREE-FORM message. Once the leader has been chosen the game proceeds as follows. In each round, the leader moves first by choosing an effort level. Following that, the information regarding the leader's effort choice and the content of the leader's message is revealed to the group members. The employees then choose their efforts simultaneously. Overall, we find that fewer women volunteer to be the leader compared to men. But this decision does seem to depend on whether the leader's gender is revealed to group members or not. When the leader's gender is not revealed, a majority of female participants volunteer to lead. But when subjects are aware that gender will be revealed, far fewer women choose to be the leader. By and large, when the message coming from the leader is identical, both male-led and female-led groups exhibit similar levels of coordination success. But, female-led groups experience significantly more coordination failure, when free-form messages are allowed. Average earnings and average effort levels are lower in groups led by females (with free-form messages) and this result is especially pronounced in the round immediately after the selection of the leader. Such findings clearly have implications about the so-called 'gender gap' in the work-place, including the fact that in most organizations one finds fewer and fewer women leaders as one moves up the organizational hierarchy.

Author(s): Ananish Chaudhuri and Sherry Li
Topic: Psychology and Biology: Gender and Individual Differences, Games: Coordination

The Gender Leadership Gap: An Experiment

Danila Serra
Southern Methodist University
ABSTRACT:
Decades after the first women took seats on corporate boards and began occupying corner offices, they remain severely under-represented in top executive jobs and in boardrooms. In this paper, we examine an overlooked behavioral constraint that may prevent women from becoming leaders within organizations. We ask whether women hesitate in becoming leaders knowing that upper-level managerial positions involve the necessity of making controversial employment choices that may generate negative judgment and backlash from employees. We also examine whether gender differences in aversion to social disapproval may lead to differences in the performances of female versus male managers. Finally, we test whether men and women have different leadership styles i.e. whether they communicate, motivate, evaluate and penalize differently, and whether workers respond differently to a male vis-a-vis a female manager. We employ a novel laboratory experiment where a manager has information about the productivity of his or her employees and has to decide their ranks and their compensations. Managerial decision-making therefore generates inequality among employees. We examine men's and women's decisions to volunteer for the managerial position and test whether their (and especially women's) willingness to lead is lower when employees can send messages of disapproval to the manager. Our experimental setting also allows us to study whether fear of social disapproval generates gender differences in the efficiency of managerial decisions, i.e. the likelihood that the manager will assign top rank and top compensation to the best performing worker. Finally, the analysis of free form messages sent by and to managers in our 'social disapproval treatment' provides new insights into gender differences in leadership styles and worker feedback.

Author(s): Priyanka Chakraborty and Danila Serra
Topic: Psychology and Biology: Gender and Individual Differences, Applied Economics: Labor Market
Back to session: Gender 2: Leadership

Effects of team gender composition on leadership aspirations

Anna Sandberg
Swedish Institute for Social Research (SOFI), Stockholm University

ABSTRACT:
Despite the significant growth in female labor force participation over the past half-century, women continue to be underrepresented in top leadership positions. In this paper, we explore how the gender composition of teams affect gender gaps in leadership aspirations and outcomes. We employ a laboratory experiment with a total of 580 participants of both genders, randomly assigning participants to teams that are either female majority (three women and one man) or male majority (three men and one woman). First, each team is instructed to discuss a task and come up with a joint solution. Then, before solving a second task, each team selects a team leader. Based on the input from the other team members, the team leader decides on a joint team answer for the second task. We find that female participants are significantly less willing to become the leader of male majority teams than of female majority teams. This effect is not driven by gender differences in ability to perform the assigned tasks. However, around half of the effect of team gender composition on female leadership aspirations seems to be driven by a loss of self-confidence - women become less confident in their ability to perform the task when in male majority teams. This suggests that the absence of women in male dominated contexts may be a self-reinforcing process, whereby the women who end up in male majority teams find themselves less confident in their own ability and, thus, discouraged from taking on a leadership position.

Author(s): Andreas Born, Eva Ranehill, Anna Sandberg
Topic: Psychology and Biology: Gender and Individual Differences, Social Behavior: Group Behavior
Back to session: Gender 2: Leadership

Gender, Beliefs and Coordination with Externalities

Tim Cason
Purdue University
ABSTRACT:
Many important decisions made by organizations are made by groups, such as committees or boards. A substantial fraction of these decisions affect external parties. This paper uses a laboratory experiment to study how the gender composition of three-person groups affects choices and beliefs in a coordination game with selfish and prosocial equilibria. We find that women prefer not to impose negative externalities on others, more so than men. Both men and women strongly believe that women will make choices that are kinder to external parties, in line with the observed difference in prosocial choices across genders. Analysis of the chat communications prior to coordination game choices reveals that women more frequently express concerns for the external party's welfare and less frequently mention money. These results have implications for public policies intended to increase the gender diversity and female representation on decision-making committees in the corporate sector, in politics, and in academia.

Author(s): Tim Cason, Lata Gangadharan, Phil Grossman

Topic: Psychology and Biology: Gender and Individual Differences, Social Behavior: Group Behavior

Gender differences in social comparisons

Michalis Drouvelis
University of Birmingham

ABSTRACT:
Social comparisons are ubiquitous across many domains of economic and social life, affecting individuals' judgments and attitudes towards others. In this paper, we examine the interplay between gender and social comparisons in individuals' earned income (from a real effort task) and cooperative behaviour in a one-shot social dilemma game. Our main findings indicate that the effects of social comparisons are gender sensitive: women are more responsive to social comparisons. We find that women are significantly more likely to increase their earned income when social comparisons are present compared to men. However, when we allow for social comparisons women become less pro-social. We discuss potential mechanisms for the observed effects. Overall, our findings shed new light on the heterogeneous effects of social comparisons that may have important implications for institutional design based on social information.

Author(s): Michalis Drouvelis, Donna Harris and Jan Jozwik


Gender Differences in Competitiveness, the Spousal Income Gap, and Children

Gahye Jeon
Peking University

ABSTRACT:
Women have been robustly found to be less competitive than men in the West. However, overlooked is the possibility that women's competitiveness may be expressed not only in the labor market but also in finding a more competitive spouse. We surveyed top graduate business students in China for their own expected future income and work hours as well as their expectation of their potential spouse's income and work hours, following Wiswall and Zafar (2016). Like them, we find that women expect to learn less than men especially at later ages and when they have children. We, moreover, find that women's expected own hours of work decreases with a hypothetical increase in spouse's salary, which we introduced into the survey, their expected number of children alone and when interacted with spouse's salary, but not their own salary. We use an all-pay auction experiment to derive a measure of competitiveness (the value
of winning) with a closed form solution following Chen, Ong and Sheremeta (2015). Women’s expectation of their spouse’s income increases on their competitiveness, their gender identity and the interaction, while their expectation of their own income does not. Our findings suggest an important endogeneity issue in prior findings of women’s lower competitiveness.

Author(s): David Ong, Gahye (Rose) Jeon
Topic: Psychology and Biology: Gender and Individual Differences, Games: Contests
Link: www.davidong.org
Back to session: Gender 3

The (Perceived) Cost of Being Female: An Experimental Investigation of Strategic Responses to Discrimination

Mackenzie Alston
Texas A&M University

ABSTRACT:

Women tend to face discrimination when they apply for male-dominated jobs. In our experiment, we ask workers to send their resumes (which we call

Author(s): Mackenzie Alston
Topic: Psychology and Biology: Gender and Individual Differences, Social Behavior: Other-regarding Preferences
Back to session: Gender 3

Ride with Me - Ethnic Discrimination, Social Markets and the Sharing Economy

Menusch Khadjavi
University of Kiel

ABSTRACT:

We study ethnic discrimination in the sharing economy using the example of Europe's largest carpooling marketplace. Based on a unique dataset with more than 17,000 rides, we estimate the effects of drivers' perceived name origins on the demand for rides. The results show sizable ethnic penalties. Further analyses suggest that additional information about actors in this market decreases the magnitude of ethnic discrimination. Our findings broaden the perspective of ethnic discrimination by shedding light on subtle, everyday forms of discrimination in social markets and informing ongoing discussions about ways to address discrimination in an era in which markets increasingly move online.

Author(s): Jasper Tjaden, Carsten Schwemmer, Menusch Khadjavi
Back to session: Gender and Discrimination (SHORT)

Trapped in homogeneity? Performance estimates and gender composition

Urs Fischbacher
University of Konstanz

ABSTRACT:

The male or female dominance in a profession is correlated with discrimination of the other gender. Such discrimination
could be based on beliefs of job-specific productivity differences or on the belief that gender homogeneity increases performance. We investigate the mechanism in an experiment. We let some groups perform a task. In a first round, the group was homogeneous with respect to gender. In a second round, we replaced one person and let the group perform the task again. A new group of subjects was invited to the lab and had to guess whether the performance was higher when the person was replaced by a male or by a female person. Three tasks have been chosen: assembling a shelf as a stereotypically male task, solving a memory as a stereotypically female task, and constructing a chain of movies and movie stars as a task with complementarities. We find that gender stereotypes regarding tasks exist but are not very strong. Further, we find a preference for heterogeneity, especially in the task with complementarities, but also in the gender-stereotypical tasks. This is evidence against the hypothesis that gender equilibria are stabilized by the belief that homogeneous groups are more productive.

Author(s): Urs Fischbacher, Dorothea Kubler, Robert Stuber

Gender, competition and the effect of feedback and choice of task: An experimental analysis

Tarek-Taher Jaber-Lopez
University of Innsbruck

ABSTRACT:

While the last decade has shown great advances by women in the labor market, there are still many women who are vastly underrepresented in upper echelon of firms and earn lower salaries on aggregate. The literature suggests gender differences in preferences for competition, confidence, or risk aversion as possible explanations. The present study uses a laboratory experiment to investigate preferences for competition, the effect of feedback and information in a competitive setting when individuals can choose their task. Results indicate that providing ranking feedback and giving participants the option to compete in their preferred task encourages more women to enter competition. Furthermore, feedback affects reported beliefs and improves efficiency. This study provides evidence that manipulating the type of feedback might be an effective alternative to close the gender gap by increasing efficiency in an environment when individuals can choose their preferred task.

Author(s): Alexandra Baier, Brent Davis, Tarek Jaber-Lopez, Michael Seidl

Do Gender Preference Gaps Impact Policy Outcomes?

Eva Ranehill
Dept of Econ. University of Zurich

ABSTRACT:

Many studies document systematic gender differences in a variety of important economic characteristics, such as risk-taking, competition, pro-sociality and overconfidence. One potential implication of this literature is that increased female representation in decision-making bodies may significantly alter organizational and policy outcomes. However, research has yet to establish a direct connection from gender differences in simple economic choice tasks, to voting over policy and the resulting outcomes. We conduct a laboratory experiment to provide a test of such a connection. In small laboratory 'societies,' people repeatedly vote for a redistribution policy and engage in a real-effort production task. Women persistently vote for more egalitarian redistribution. This gender difference is large relative to other voting differences based on observable characteristics and is partly explained by gender gaps in preferences and beliefs. Gender voting gaps persist with experience and in environments with varying degrees of risk. We also observe policy differences between male- and female-controlled groups, though these are considerably smaller than the mean individual
differences are a natural consequence of the aggregation of individual preferences into collective outcomes. Thus, we provide evidence for why substantial and robust gender differences in preferences may often fail to translate into differential policy outcomes with increased female representation in policymaking.

**Author(s):** Eva Ranehill Roberto Weber  
**Topic:** Psychology and Biology: Gender and Individual Differences, Public Choice: Voting and Rent Seeking  

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**Group Membership and Gender Competitiveness**

**Barbora Baisa**  
Masaryk University

**ABSTRACT:**

Various experimental laboratory studies have shown that women, on average, respond less favorably to competition compared to men albeit women are often equally productive. According to the experiments conducted in the first decade of the 21st century, women rarely enter the competition. Further laboratory and field experiments confirmed these findings. Following the studies showing that women are equally skilled, educated and productive, the question arises how to encourage qualified women to compete. Several studies suggest a change in the nurture of women or even girls in very young age while others recommend an application of an affirmative action via mandatory or recommendatory quotas regarding the composition of women on boards of directors, government etc. As far as I know, no similar research has been conducted yet on whether an introduction of a group identity increases a willingness of women to compete individually. Therefore, the aim of this paper is to present an economic experiment verifying previous findings regarding the gender differences in competitiveness and to find out whether an implementation of a group identity could increase willingness, in particular, of high-performing women to compete in order to increase overall payoff of their group as well as the welfare of them as individuals. The group identity was introduced by a random distribution of the participants of the experiment into teams of four. Subsequently, a collective task to create a group flag consisted of the same color symbols chosen by participants was used to strengthen the team identity. It is expected that thanks to the laboratory experiment it should be possible to identify a viable solution for motivating women to be more eager to compete. Moreover, I assume, that the analysis of the information gathered via experiments should bring answers to the question whether and how group membership increases the competitiveness of women or whether the group membership affects their performance (as opposed to willingness to compete) under a competition.

**Author(s):** Barbora Baisa  
**Topic:** Psychology and Biology: Gender and Individual Differences, Decision Theory: Preferences

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**In-group Bias and Willingness to Compete**

**Hirofumi Kurokawa**  
Doshisha University

**ABSTRACT:**

We conduct an experimental study to investigate the impact of group identity on men and women's willingness to compete. First, subjects' identities are induced by the minimal group paradigm. A paired competitor is randomly assigned. Some subjects are paired the same identity competitor (in-group) and the others are paired a different identity (out-group). Second, subjects perform a real effort task under a piece rate and then under a competitive tournament. Subjects can then choose which compensation scheme to apply in the next round. Our main result is that men are more willing to compete when the competitor is the out-group than when the competitor is the in-group, but women are not willing to compete with the out-group competitor as well as the in-group competitor.
Revisiting the Gender Effects of Competition: Social Status Concerns and Rivalry for Resources are Substitutes

Arthur Schram
CREED

ABSTRACT:

Competition involves two main dimensions, a rivalry for resources and the ranking of relative performance. The original studies on gender differences in response to competitive incentives all focus on the rivalry dimension. In a recent paper, we show that even in the absence of such rivalry, concerns for social status yield gender differences that are comparable to those observed with rivalry. Here, we use an experimental design that allows us to isolate the separate effects of rivalry for resources and status concerns as well as their combined effect. Participants do a time-limited task where they need to search for numbers and add them up. Performance is straightforwardly measured by the number of correct summations. We distinguish between three main treatment dimensions: (i) rivalry for resources (by using a tournament-style payoff); (ii) private status ranking (by providing each participant with information about his/her relative performance); and (iii) public status ranking (by having the participant report his/her relative score to a peer). Our results show no gender differences in performance when there is no rivalry for resources, nor private or public status ranking. Introducing any of these dimensions in isolation yields large and significant gender differences. In all cases, men perform much (up to 50%) better than women. These results imply that rivalry, private status ranking and public status ranking are substitutes: adding any one of these to one already in place does not further affect the gender difference. This suggests that conclusions drawn in the original studies might be missing equally valid alternative explanations.

Status-Ranking Aversion

Klarita Gerxhani
European University Institute

ABSTRACT:

Competition involves two dimensions, rivalry for resources and status-ranking. Our experiment isolates the effects of the latter. Participants do a task under non-rivalry incentives. Before doing so, individuals indicate whether they choose an environment with social-status ranking or one without. When a man does a ranking that is imposed on all others, women choose status-ranking less frequently than men. There is no gender difference with a female ranker. This finding complements the established result that women are averse to competing under rivalry for resources, in a qualified way. Women also exhibit status-ranking aversion, but only when ranked by a man.
ABSTRACT:

This paper compares the theoretical predictions obtained from the global-game selection (GGS) with empirical results from experiments and discusses whether and how the GGS can be used as descriptive theory. Based on new results for the equilibrium characterization, it shows how to decompose a game with different player types in such a way that simple solution techniques can be applied for deriving the GGS. The paper explains the solution technique and applies it to a particular class of games with ex-ante asymmetric players. We then analyze the predictive power of the GGS using data from experiments on symmetric and asymmetric one-shot coordination games. Here, we suggest measuring the predictive power of a selection theory by the proportion of observed decisions that it predicts correctly. While the GGS has a high predictive power in symmetric games, it does not provide good guidance in asymmetric games. Simple cognitive hierarchy models yield better predictions. The best response to a Laplacian belief about the distribution of other players' actions yields the best prediction in symmetric and asymmetric games.

Author(s): Frank Heinemann
Topic: Games: Coordination, N/A
Link: http://www.macroeconomics.tu-berlin.de/menue/team/fh/
Back to session: Global Games and Coordination

Pay cuts and layoffs in an experimental minimum effort coordination game

Tony So
UoAuckland

ABSTRACT:

It is well-documented that during recessions, businesses prefer to lay off workers rather than implement across the board pay cuts. We examine the impact of pay cuts versus layoffs on intra-organization coordination, which is a fundamental problem facing firms involved in team production, by looking at behavior in the minimum effort coordination game following an intervention. Our results suggest that, contrary to received wisdom, both pay cuts and layoffs foster better coordination success. In particular, we do not find that pay cuts are detrimental to intraorganization coordination.

Author(s): Tony So; Ananish Chaudhuri; Bradley Ruffle
Topic: Applied Economics: Labor Market, Games: Coordination
Back to session: Global Games and Coordination

Managing coordination on bubbles in experimental asset markets with monetary policy

Myrna Hennequin
University of Amsterdam

ABSTRACT:

We study the effect of a 'leaning against the wind' monetary policy on asset price bubbles in a learning-to-forecast experiment, where prices are driven by the expectations of participants in the market. We find that a weak interest rate response is not able to prevent large price bubbles, caused by trend-following behavior. By contrast, a strong interest rate response is successful in deflating large bubbles. Giving information about the interest rate changes and communicating the goal of the policy increases coordination of expectations and works stabilizing. When the steady state fundamental price is unknown and the interest rate rule is based on a proxy instead, the policy is less effective.

Author(s): Myrna Hennequin and Cars Hommes
Bank runs as a coordination problem within a two banks set-up: an experimental study

Ekaterina Shakina
University of Milan

ABSTRACT:

In the current paper I analyze the withdrawal behavior of depositors. By extending the classical Diamond & Dybvig model for the two banks case I give a chance to the players not only to keep or withdraw, but also to reallocate a deposit to another bank. Comparing such a framework with a classical case when two banks are functioning independently, I find out that in case when there is a redepositing option, depositors are better off to use it instead of simply withdrawing. From the economic point of view, it means that in a model with redepositing the consequences of a bank run should be less severe as far as there is no outflow of cash from the banking system rather reallocation of deposits to another bank. I prove that with the help of an experiment showing that subjects are rather reallocating than withdrawing the money when there is a choice between banks. At the same time client of a bank to which the money may be redeposited to demonstrate less withdrawals and panic. Besides that having a complete information about the counterpart moves, helps depositors to cooperate and learn not to panic as time elapses. Lastly I test for the effect of risk aversion as well as gender on the decision-making of players but find no significant influence on the withdrawal behavior.

Author(s): Ekaterina Shakina

An Experimental Study on Complex Choices: Social Influence and Order Effects

Marisa Hidalgo
Universidad Pablo de Olavide

ABSTRACT:

Online search companies such as Amazon, Bing or Yahoo use order lists (or rankings) to present products to consumers. The underlying reason for observing a specific order is somewhat opaque. Moreover constructing relevant rankings requires understanding their causal effect on consumer choices. In addition to such framing effect most products advertised through the Internet provide information about their 'popularity'. This introduces another feature relevant for predicting consumer behavior. Although in reality these two issues are inter-connected (i.e., typically consumers assume that products that are ranked first are those more approved by others), understanding their independent and combined implications in a stylized and controlled environment could be enlightening. For this purpose, we perform a lab experiment focusing on a framework where the alternatives have an objective value and where, due mainly to time constraints, the decision is complex. Alternatives are presented in a certain order and, in some treatments, also information about the behavior of other participants is provided. We find that both order and social influence effects exist, although the second is stronger than the first. We also observe that the effect of social influence is more relevant when the decision is more complex. At the individual level, we show that risk aversion and high confidence reduces the sensibility to social influence. Finally, men are more sensible to social influence than women.

Author(s): Natalia Jimenez, Marisa Hidalgo, Dunia Lopez
To whom you may compare: Preferences for peers

Lukas Kiessling
University of Bonn

ABSTRACT:
Influence of peers is widely spread throughout many domains of our life like consumption, general well-being, and individual performance on the job or in school. However, peers that have an influence on us are not randomly selected, but might be carefully chosen. This paper describes students' preferences for peers and presents evidence on the individual determinants of peer choice. We find that students on average prefer peers of higher ability, but these preferences vary with their personality traits. Higher competitiveness, lower extraversion, and an internal locus of control are associated with preferences for superior peers. Taking social network information into account, we find homophily in agreeableness and attitudes for social comparisons even conditional on friendship ties. Regarding the design of peer assignment mechanisms, our results highlight the importance of accounting for the multidimensionality of peer preferences.

Author(s): Lukas Kiessling, Jonas Radbruch, and Sebastian Schaubé
Topic: Social Behavior: Group Behavior, Social Behavior: Other

Do image spillovers deter rule breaking?

Remi Suchon
GATE

ABSTRACT:
We test whether individuals internalize the effects that their behavior may have on the social image of their group. In our experiment, we recruit pairs of real-life friends and study whether rule breaking in the form of misreporting decreases when misreporting may have negative spillovers on the image of the friend. We find that participants hurt their friends' social image by misreporting because external observers update their beliefs: they rightfully expect that a participant whose friend misreported is likely to misreport himself. Surprisingly, participants misreport as often when their behavior can hurt the friend's image as when it cannot. Our interpretation is that they underestimate the impact of their behavior on external observers' beliefs about their friends. Our results cast doubts on the capacity of groups to sustain a good image absent the possibility of punishment, which is bad news. The good news is that external observers may use image spillovers to update their beliefs and interact with members of social groups more efficiently.

Author(s): Remi Suchon, Daniel Houser
Topic: Social Behavior: Group Behavior, Social Behavior: Lying and Cheating

Humans reciprocate intentional harm by discriminating against group peers

David Hugh-Jones
University of Warwick

ABSTRACT:
The evolution of human intergroup conflict is a social science puzzle. Motivated by cycles of intergroup revenge in real-world conflicts, we experimentally test the hypothesis that humans practice group-based reciprocity: if someone harms
Helping Behavior and Group Size

Pol Campos
Lund University

ABSTRACT:
Will a person in need of help be more likely to be helped when there are one or several potential helpers? Dozens of experiments have led social psychologists to conclude that the answer to this question depends entirely on the situation. This project uses game theory to predict in what situations one potential helper is more likely to provide help than a group of several potential helpers, and in what situations the opposite is true. The theoretical model concludes that in situations where few potential helpers are willing to help, then help is more likely to be provided when many people can help. However, in situations where most potential helpers are willing to help, help is more likely to be provided when only one person can help. I test these predictions in a lab experiment [experiment due in May 2018].

Promises in group decision making

Valeria Faralla
University of Piemonte Orientale

ABSTRACT:
We assess in the laboratory the impact of pattern of decision processes and promise keeping on efficiency in group decision making. The gift-exchange game provides the testing ground for our experiment. This sequential game simulates an employment contract between a proposer and a recipient in which the proposer is required to select the amount (w) he wants to transfer to the recipient. Then, the recipient chooses a costly effort level (f) that determines the firm's return. When played between groups, coordination within groups represent a condition for efficiency in overall group decision making. We test the effect of promise keeping with and without leadership in decision processes. We find that hierarchically arranged groups perform better than groups without hierarchy. We also find that promise keeping has a positive impact only on recipients' decision (+f) and on overall efficiency as measured by total earnings. We attribute this result to the fact that the act of promise keeping reinforce the spontaneous coordination among recipients but not within proposers' groups. This finding is explained by the fact that promise keeping is effective in groups decision-making only for first-mover.
Incentives for conformity and disconformity - a step towards innovation
Katrin Schmelz
University of Konstanz

ABSTRACT:
Innovation often requires that people publicly challenge preexisting standards or practices. With sequential decisions, conformity can be a bottleneck for innovation. We experimentally study the effect of two different incentive structures on conformity and disconformity in a task where innovation is possible. In the experiment, participants in the role of designers design colors by iteratively mixing preexisting colors starting from the extremes in the RGB color space. Subsequently, they publish one of their colors in groups of four. The submissions of the group are reviewed by an external subject who selects one of the individuals and assigns either a bonus (reward treatment) or a malus (punishment treatment). Preliminary evidence shows that the diversity of submissions is higher under reward compared to punishment.

Author(s): Fabian Dvorak, Urs Fischbacher, Katrin Schmelz
Topic: Social Behavior: Group Behavior, N/A

Comparison of Sociological, Social-psychological and Economic Theories as Predictors for Decision-Making in a Game-Theoretical Social Good-Experiment with Large Groups
Claudia Biniossek
GESIS

ABSTRACT:
Previous experimental findings about the decision-making behavior of individuals interacting in large groups tend to be contradictory. This speech focusses on the question how (monetary) discrimination of various subgroups influences the individual decision-making process in large groups. For this purpose, data from nine variants of a game-theoretical social good group experiment with 33 respectively 27 group members were analyzed. Participants had to decide between group interest and self-interest by majority vote. The quantitative analysis of individual decision-making is complemented by a written survey and a qualitative interview. Furthermore, individuals have the opportunity to donate some of their post-game funds to a charity. The results are as follows: The majority of individuals act self-maximizing. However, a significant amount of individuals, even in very large groups, choose the concept of equality as principle of justice within the framework of the specific low-cost hypothesis. Only if a very small minority is heavily disadvantaged, it is highly significant to help the disadvantaged group members in the sense of the identifiable victim effect. The model of frame selection (MFS) proves successful in explaining when individuals select one of several competing justice principles. However, it was not possible to confirm the assumption of social preference across situations.

Author(s): Claudia Biniossek and Dirk Betz

The Power and Limits of Peer effects: Performance Goals versus Task Difficulty
Dorothea Kuebler
Technical University Berlin

ABSTRACT:
We study peer effects in two dimensions of individual performance, namely goal setting and task difficulty. A real effort task of counting as many dark squares in grids as possible is employed for both dimensions, where subjects receive a piece rate for all grids that have been counted correctly. In the GOAL treatment, subjects are asked to state a performance goal regarding the number of correctly counted 6x6 grids. If they reach the goal, they earn a bonus in addition to the piece rate that is proportional to the goal. In the GRID treatment, subjects choose the grid size (between 2x2 and 10x10) and are paid a piece rate per correctly counted grid that varies with the grid size. After making this choice subjects receive information about the average choice of two randomly picked peers. We find that peer effects are significant in the GOAL treatment where subjects revise their goal in the direction of the peer information. There are no significant peer effects in the GRID treatment, since the majority of subjects do not adjust their choice of grid size. This indicates that peer effects are more important when the information about peers concerns direct measures of performance, and less so when it concerns the method of performing a task.

**Author(s):** Philipp Albert, Juliana Silva Goncalves, Dorothea Kuebler  
**Topic:** Social Behavior: Group Behavior, N/A  
**Back to session:** Group Behavior (SHORT)

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**Intra-household Inequality and Productivity. Evidence from A Real Effort Experiment.**

**Alistair Munro**  
**National Graduate Institute for Policy Studies**

**ABSTRACT:**

We investigate experimentally how changes in wage rates and entitlements affect individual productivity in lab-in-the-field experiments run with married couples from rural regions in Uganda. We design a game in which the production task itself is straightforward, but where the rules governing payment vary across subjects and between rounds. In some cases, all the value of output goes to the husband; in other cases all goes to the wife; in other cases the value of output is shared equally and finally in some cases each spouse receives income according to only their own output. To consider the effects of wage inequality we vary the price paid for each completed item so that the ratio of male to female wages varies from 0.5 to 2. All this is done transparently so that both partners know the rules of the game. The results generally indicate that a rise in relative wages lowers relative effort, a result that is contrary to the most straightforward interpretation of standard models of the household, and suggests that issues of fairness and desert affect effort in an intra-household setting.

**Author(s):** Faith Masekesa and Alistair Munro  
**Topic:** Social Behavior: Group Behavior, Applied Economics: Labor Market  
**Back to session:** Group Behavior (SHORT)

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**How scarcity affects borrowing decisions in groups**

**Kjell Arne Brekke**  
**University of Oslo**

**ABSTRACT:**

When the means to an end are scarce, decisions makers focus their attention, using available resources most effectively. However, this increased focus comes at a cost. Decision makers lose oversight and neglect important but less pressing long-term projects. They borrow too much and overall performance decreases as a consequence. Until now, this research has concentrated on individual decision makers. We study how scarcity affects borrowing decisions in groups. We replicate the experiment of Shah, Mullainathan, and Shafir [Science 338, 682-685, (2012)] and give participants a large or small time budget to fulfill a task. We cross these treatments with whether participants can borrow from their partner or not. We find that for groups, as for individuals, scarcity increases borrowing and decreases performance. Moreover, we show that these negative effects of scarcity are stronger for individuals than for groups. Even in our minimal design...
that excludes direct interaction or communication, the fact that participants know that their own behavior affects another participant disciplines the use of the scarce resource.

Author(s): Kjell Arne Brekke and Florian Diekert
Topic: Social Behavior: Group Behavior, N/A
Back to session: Group Behavior (SHORT)

Home Owner Associations and City Secession

Tim Salmon
Southern Methodist University

ABSTRACT:
Inequality has been rising dramatically in US cities over the past few decades which means in turn that the wealthy have been engaging in ever greater subsidies of public goods for the less wealthy in those cities. One might expect that such dynamics could lead to segments of cities seceding and indeed there have been attempts to do so. Few succeed and there aren't as many attempted as one might expect. We investigate one possible reason for these observations which is the rise of Homeowner Associations. HOAs allow wealthy residents to form small exclusive public goods providing districts inside of cities at less cost than full secession while allowing them to provide local public goods at a higher level. We examine the capacity for such an option to diminish the drive to secede and we examine the additional difficulty for secession due to the underlying coordination problem involved.

Author(s): Ron Cheung, Tim Salmon and Kuangli Xie
Back to session: Group Behavior (SHORT)

Reconciliation after inter-group conflict: Testing different types of contact interventions in the lab

Katharina Werner
University of Passau

ABSTRACT:
After violent conflict, encounter programs are a commonly used intervention, assuming that contact between members of the conflicting parties can re-establish cooperation by fostering forgiveness, mutual understanding and trust. Such encounters often combine different types of contact between group members, ranging from pure meetings over talking about emotions or motives to joint projects with a common goal. Although such encounter programs require a lot of resources, the efficacy of contact after conflict lacks empirical support. What type of contact works and through which channels? In a laboratory experiment, we control factors like the duration and power relations of a conflict and exogenously induce different types of contact between groups, without the possibility of self-selecting into programs. Conflict is modeled by a repeated group Tullock contest in which relative contributions to the groups' contest funds determine their winning probabilities. The winning group can then take from the losing group's endowment ' up to everything the losing group has left. A subsequent one-shot Multilevel Public Goods Game (MPGG) measures cooperation within and across groups. Between the contest and the MPGG, we test different types of contact interventions. The results suggest that a joint project with a common goal is most efficient in re-establishing cooperation, mainly via an increased feeling of a common group identity. Expressing emotions and motives to each other only had a moderate effect on cooperation, while apologizing to each other even was rather detrimental to cooperation.

Author(s): Katharina Werner, Swee Hoon Chuah
The Price of Exclusion, and the Value of Inclusive Policies

Sergio Mittlaender
Max Planck Institute for Social Law and Social Policy

ABSTRACT:

Societies, communities, groups, and teams must often decide to exclude or to include other individuals. Besides leading to segregation or to integration, this decision is apt to have long-lasting effects upon prosocial behavior of victims and perpetrators, as well as on the effectiveness of policies and legal remedies that aim at re-integrating previously excluded individuals. This article studies, firstly, the consequences of exclusion on the subsequent prosocial behavior of excluded individuals in the resulting segregated public good games. The use of majority voting to enforce exclusion lead to conflicting normative views among those responsible for that decision, and to a pronounced reduction in contributions of those who voted for inclusion, but who were outvoted by a majority voting to exclude. Secondly, this article studies the effect of two distinct kinds of policies that re-integrate excluded individuals, providing evidence that a policy that re-includes them back into the same group from which they were excluded, and together with those individuals responsible for their exclusion is counter-productive and reduces prosocial behavior because of negative reciprocity. In contrast, a policy that re-includes the excluded into another, different group does not activate the norm of reciprocity, and is apt to restore prosocial behavior of previously excluded individuals. Implications for public policies to overcome segregation and for different legal instruments to redress discrimination are discussed

Author(s): Sergio Mittlaender

Post-promotion effort and group identity

Michal Durinik
Masaryk University Brno

ABSTRACT:

When filling a vacant position, firms might have a choice between an internal and external candidate. Internal candidates often have an advantage over the external ones: the firm knows them better and they may possess firm-specific skills. Who, however, works harder if promoted? Is it the internal candidate, as he shares the group (firm) identity with the employer and is thus more likely to reciprocate? Or is it the external candidate, perhaps surprised by the decision and thankful for the displayed trust? We employ a two-stage laboratory experiment to investigate our conjectures. In Stage 1, the firm chooses either an internal or an external candidate to be assigned to a high-productivity, high-salary job. The other candidate is assigned to a low-productivity, low-salary job. In Stage 2 both the promoted and non-promoted candidate exert effort. We observe the firm's decisions and expectations. Using the strategy method, we also observe expectations and effort levels of promoted and non-promoted candidates.

Author(s): Michal Durinik, Maros Servatka, Lyla Zhang

Social Comparison at the Workplace: Evidence from a Field Experiment in Kolkata, India
ABSTRACT:

Unfair treatment at the workplace encourages workers to adjust their behavior in order to restore fairness and align monetary returns to costs. This adjustment of behavior as explained by the Equity Theory may differ depending on the reference group used to evaluate equity. In this aspect two main questions are to be considered: How do workers respond to unfair treatment at the workplace, and how does this response change depending on the identity of the reference group. To answer the above research questions, this paper utilizes data from a randomized field experiment conducted in Kolkata, India where student assistants were hired to help in a data entry task. Recruited workers were working in a team of two and were offered a fixed wage per hour. Workers were randomly assigned to one of the following treatment groups (1) A control group not subjected to wage cuts (2) A unilateral wage cut in reference to colleagues whose gender identity was not revealed (3) A unilateral wage cut in reference to colleagues with similar gender identity (4) A unilateral wage cut in reference to colleagues with a different gender identity. Results show a significant decrease in the quantity and quality of work following a wage cut. A severe drop in productivity was presented by men in the case of unilateral wage cut despite the gender identity of the partner, while women experiencing unilateral wage cuts didn't exhibit a similar behavior. To the contrary, women matched with a male colleague and experiencing unilateral wage cut show a slight increase in productivity, a result that contributes to the discussion regarding the paradox of the 'content female worker'. These findings highlight the necessity of a better understanding of the social comparison processes prevailing at the workplace, given the major role they play in determining the level of productivity supplied.

Author(s): Pooja Balasubramanian and Ghida Karbala

Topic: Social Behavior: Lying and Cheating, Social Behavior: Other

Do Minorities Misrepresent their Identity to Avoid Being Discriminated? Experimental Evidence From Georgia

Philipp Lergetporer
ifo Institute

ABSTRACT:

We study minorities' strategic behavior to avoid being discriminated in a framed field experiment with more than 600 school children in Georgia. In our modified trust game, the minority trustee (ethnic Armenian) could send a signal about her ethnic identity to the majority trustor (ethnic Georgian) in the initial stage of the game. Our preliminary results show that a large share of minority trustees misrepresents their ethnicity to majority trustees to avoid being discriminated. This strategy successfully mitigates discriminatory behavior of majority trustors. Therefore, the signaling stage has a large and positive effect on overall efficiency. Our results have important implications for designing of anti-discrimination policies.

Author(s): Nikoloz Kudashvili, Philipp Lergetporer

Topic: Social Behavior: Other-regarding Preferences, Social Behavior: Communication

The Good Outcomes of Bad News. A Randomized Field Experiment on Formatting Breast Cancer Screening Invitations

Luca Corazzini
University of Venice
ABSTRACT:
We ran a population-level randomized field experiment to ascertain whether a costless manipulation of the informational content (restricted or enhanced information) and the framing (gain or loss framing) of the invitation letter to the national breast cancer screening program affects the take-up rate. Our experiment involved more than 6,000 women aged 50-69 targeted by the screening program of the Province of Messina in Sicily, randomly assigned to receive different invitation letter formats. Using administrative data from the Local Health Authority archives, we show that giving enhanced loss-framed information about the risks of not having a mammography increases take-up rate by about 25 percent with respect to the control group. The other treatments (no information; restricted gain-framed information; restricted loss-framed information; enhanced gain-framed information) are instead ineffective. Results are stronger for subjects living farther away from the screening site. For them, the manipulation may indicate higher perceived risks of negative outcomes that makes it worthwhile to participate in the screening program, in spite of longer travel time.

Author(s): Marco Bertoni, Luca Corazzini, Silvana Robone
Topic: Field Experiments: General, N/A
Link: https://www.york.ac.uk/media/economics/documents/hedg/workingpapers/1727.pdf

The impact of self-selection on performance

Jonas Radbruch
University of Bonn and IZA

ABSTRACT:
In many natural environments carefully chosen peers impact individual behavior. In this paper, we examine how self-selected peers affect performance in contrast to randomly assigned ones. We conduct a field experiment in physical education classes at secondary schools. Students participate in a running task twice. First, students run alone, then with a peer. Before the second run, we elicit preferences for peers. We experimentally vary the matching in the second run and form pairs either randomly or based on elicited preferences. Self-selected peers improve individual performance by .14-.15 SD relative to randomly assigned peers. While self-selection leads to more social ties and lower performance differences within pairs, this altered peer composition does not explain performance improvements. Rather, we provide evidence that self-selection has a direct effect on performance and provide several markers that the social interaction has changed.

Author(s): Lukas Kießling, Jonas Radbruch, Sebastian Schaube
Topic: Field Experiments: General, Social Behavior: Other

Why do people not vaccinate?

Manuel Hoffmann
Texas A&M University

ABSTRACT:
Public health organizations promote influenza immunization as the best practice to prevent and minimize the effects of the flu. However, adults in general do not get vaccinated. In most countries in the world, vaccination rates are well below the 80% threshold that results in herd immunization recommended by the World Bank. This is despite that the flu and other vaccine-preventable diseases have high economic costs. In the U.S., these diseases have an economic burden of approximately $9 billion per year, 80% of which can be attributed to unvaccinated individuals (Ozawa et al., 2016). Given the large societal costs and benefits, we are asking: Why do people not vaccinate? We investigate the question by analyzing the factors that drive vaccination take-up and the subsequent consequences of flu immunization on
productivity, absenteeism and employee evaluations. In partnership with a bank in Ecuador, we implement a field experiment to investigate how changes in monetary and non-monetary costs and information about the individual and social benefits affect vaccination take-up of their employees. To our knowledge, we are the first who investigate opportunity costs and actual price changes on vaccination take-up as well as the effects of a health-changing device on productivity using experimental variation in a natural setting. We combine our experimental variation in take-up with administrative data and pre- and post-intervention surveys. Our preliminary results suggest that providing information of benefits and prices do not have an effect on vaccination, while changing opportunity costs increases take-up by a large 100% with respect to the baseline.

Author(s): Adrian Chadi, Manuel Hoffmann, Roberto Mosquera
Topic: Field Experiments: General, Applied Economics: Labor Market
Back to session: Health and Performance

Is prompting participants to plan successful? Field evidence from MOOCs

Katja Fels
RWI - Leibniz Institute for Economic Research

ABSTRACT:
Massive Open Online Courses (MOOCs) have become popular and appear to be a promising, innovative tool for lifelong learning. But, as shown by various studies, many participants drop out from their MOOC. Therefore, based on behavioral insights, we investigate how prompting participants to plan increases completion rates. We conduct a randomized controlled trial on a MOOC-platform in four courses. Overall, we find no significant effects of the planning prompt on course completion. Our results suggest heterogeneous effects of the planning prompt that may be off-setting. A more precise targeting of certain participant groups, that seem to benefit from planning prompts, may be a way forward.

Author(s): Mark Andor, Katja Fels, Jan Renz, and Sylvi Rzepka
Topic: Field Experiments: General, Applied Economics: Other
Back to session: Health and Performance

Honesty at the Margin: Experiments on the Dynamics of Deception

Simon Halliday
Smith College

ABSTRACT:
Our paper examines the evolution of dishonesty over time. In particular, we focus on the following question: In market activities where dishonesty is rewarded, does others' dishonesty crowd out honest participants, or instead do initially honest types evolve to become more dishonest? Our paper responds to a large experimental literature rooted in the Fischbacher and Foellmi-Heusi (2013) framework, which has shown a robust preference for honest dealings. However, this research is focused on static settings, examining short-run behavior. Our project instead uses the same die-rolling paradigm to examine questions about long-run behavior. In an environment with both an extensive-margin decision on whether to engage, and an intensive-margin decision over whether to act dishonestly, our project measures which margin is most important for selection, and whether preferences for honesty are robust to long-run forces.

Author(s): Simon Halliday, Jonathan Lafky, Alistair Wilson
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals
Back to session: Honesty, Lying, and Cheating (SHORT)
Homophily, peer effects and dishonesty

Marie-Claire Villeval
GATE(CNRS-University Lumiere Lyon 2- ENS) and IZA, Bonn

ABSTRACT:
It is widely believed that the dishonest behavior of an individual is influenced by his/her peers. The peer effects of dishonesty are hard to identify in empirical works because of self-selection. Indeed, individuals with common preferences or characteristics tend to associate together and this may explain that they behave similarly (homophily). In this paper, we use a laboratory experiment to disentangle peer effects on behavior from the influence of endogenous network formation with an application on lying behavior. We create two controlled environments: one in which peers are randomly assigned to participants and one in which participants can choose their peers. Our results show that participants tend to be homophilious, i.e. participants who lie to a larger extent choose peers that are more likely to be liars. In contrast, we find little evidence of pure peer effects.

Author(s): Liza Charroin, Bernard Fortin and Marie Claire Villeval
Topic: Social Behavior: Lying and Cheating, Social Behavior: Group Behavior

The Effect of Scarcity on In-Group Bias in Pro-Social and Moral Behavior: Evidence from Coffee Farmers in Guatemala

Billur Aksoy
Texas A&M University

ABSTRACT:
A relatively new but emergent literature suggests that scarcity impairs cognitive ability, often resulting in people making poor financial decisions. In this paper, we shift the focus from financial decisions to social and moral behavior. More specifically, we study the impact of scarcity on altruism and cheating. We conducted a two stage lab-in-the-field experiment with low-income coffee farmers in a small village in Guatemala. The main source of income for our subject pool originates from harvesting and selling coffee. The harvesting season normally spans from late September to early March. During the harvesting period, coffee farmers in this region experience a significant income boost from selling their coffee beans. However, during the nonharvesting months, our sample of coffee farmers experience a substantial decline in income inducing a pronounced state of scarcity. Using this distinctive variance in income, we first conducted our experiment in mid-September before the coffee harvest. We refer to this first stage as the scarcity period. We then repeated the experiment 'with the same group of subjects' in early December at the peak of the harvesting season. We refer to the second stage as the relative abundance period, or simply abundance. We study the difference in decisions between the scarcity and the abundance periods. Subjects played a sequence of the same games in each stage. In this paper, we focus our attention on dictator and cheating games. Subjects played two dictator games: One with an in-group member (i.e. someone from their village) and another one with an out-group member (i.e. someone from outside the village). We find that the money transferred to the in-group member was not statistically different between the scarcity and abundance periods. However, the amount sent to the out-group member is significantly lower in the abundance period relative to the scarcity period. Furthermore, while there is no significant in-group bias (the difference between the amounts sent to the in-group versus out-group member) in the scarcity period, there is a significant in-group bias in the abundance period. In-group favoritism is a phenomenon that has been extensively documented in the psychology and economics literature. We replicate the in-group favoritism in altruism during the abundance period. However, there is no in-group favoritism during the scarcity period. This result suggests that when scarcity strikes, in-group bias in altruism tends to disappear, and when times are tough, people exhibit a general propensity to help others. We set up three cheating treatments using the dice game paradigm (Fischbacher and Follmi-Heusi, 2013). First, subjects played the cheating game to determine their own earnings for completing a survey at the end of the experiment. The second cheating game determined the payment for the in-group member. The last cheating game determined the out-group
member's payment. In the scarcity period, we find that subjects cheat in all three treatments. While, cheating for self is significantly higher than in other two treatments, there is not significant difference between the cheating behavior for the in-group member and the out-group members. This means that there is no in-group favoritism in cheating during scarcity. In the abundance period, however, different from the scarcity period, we do find evidence for in-group favoritism. Although cheating for self and the in-group member is similar across periods, subjects do not cheat for the out-group member anymore in the abundance period. These findings are similar to the dictator game findings. Although we see in-group favoritism during abundance period, it disappears in the scarcity period.

Author(s): Billur Aksoy and Marco Palma
Topic: Social Behavior: Lying and Cheating, Field Experiments: General
Back to session: Honesty, Lying, and Cheating (SHORT)

Interdependent Lying Costs: Theory and Experimental Evidence

Georgia Michailidou
New York University Abu Dhabi (NYUAD)

ABSTRACT:

We develop a theoretical model where individuals can have interdependent lying costs, i.e., the cost of lying of player i depends on the size of the lies of player j. The model predicts that if the marginal cost of lying of player i is decreasing with the lies of player j, i.e., lies are strategic complements, then individuals will lie more in strategic interactions than in non-strategic situations in the absence of complementarities in production. The model also predicts that when two individuals are exposed to the same moral dilemma, and lies are strategic complements, then average lying under sequential play is higher than a ceteris-paribus simultaneous play. We use a variant of the die under the cup paradigm (Fischbacher and Foellmi-Heusi, 2013). Subjects privately observe the outcome of a random variable (a six sided die), report the outcome, and receive a monetary payoff proportional to their report. We implement the random draw on the computer and thus are able to recover the true state. To minimize the role of social preferences the outcome of the random draw is identical for each pair of subjects for a randomly matched pair (i, j). It is common knowledge that players in each pair observe a common realization of the die roll. We use a multiple treatment variations to test the theoretical predictions. We find our research to be relevant in addressing policy related questions such as whether observing peers' behavior in moral dilemmas affects own behavior in a different manner than when forming and acting on the beliefs about peers' behavior.

Author(s): Colzani P., Michailidou G., Santos-Pinto L.
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals
Back to session: Honesty, Lying, and Cheating (SHORT)

Bribing the Self

Roel van Veldhuizen
WZB Berlin

ABSTRACT:

We examine the role of self-deception in the provision of advice. When advisors are informed about their incentive to recommend a given investment before judging the available investments, recommendations are biased toward the incentivized investment. However, when the information regarding incentives is provided to the advisor after an initial private judgment of the investments, the bias is significantly reduced. Consistent with self-deception, this behavior occurs only when advisors can find a reason to recommend the incentivized investment. We explore the persistence and boundary conditions of self-deception and find that even the smallest excuse allows advisors to distort recommendations.
Endogenous Leadership and (Dis)honest Behavior

Lilia Zhurakhovska
University of Duisburg-Essen

ABSTRACT:
Leaders often have to be tough and sometimes have to take decisions for the sake of their teams that are in moral gray areas. In reality, usually people select themselves into leader roles. It is natural to assume that those subjects, who deliberately decide to become leaders are those types who are willing to make such tough decisions and this might explain why few women are leaders in particular businesses. In a laboratory experiment with endogenous leadership allocation we show that leaders lie more if their decisions affect the payoffs of the group than their own payoffs only. This effect is particularly pronounced for women. Men select themselves more often into the leader-role and they lie significantly more in individual decisions compared to women. In control treatments with exogenous leadership allocation (with different probabilities to become leaders) we do not find an increase in lying behavior when subjects' decisions affect the payoffs of the group compared to individual decisions.

Author(s): Kerstin Grosch, Stephan Mueller, Holger Rau, Lilia Zhurakhovska
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals
Back to session: Honesty, Lying, and Cheating (SHORT)

Lying on two dimensions and moral spillovers

Franziska Heinicke
Utrecht University School of Economics

ABSTRACT:
The expanding literature on lying has been exclusively studying lying behavior within a uni-dimensional context. While this has been an important first step, many real-world contexts involve the possibility of simultaneously lying in more than one dimension (e.g., reporting one's income and expenses in a tax declaration). In our study, we investigate individual lying behavior within a context where there is the possibility of simultaneously lying in two distinct dimensions. More specifically, we conduct a laboratory experiment to elicit lying behavior in two stages. In the first stage, where participants can simultaneously lie in two distinct dimensions, we assess whether moral spillovers in the sense of moral consistency or moral balancing emerge between dimensions. That is, honesty on one dimension may legitimate lying on the other dimension while maintaining a positive self-image. The second stage, where we again elicit participants' lying behavior, further allows us to assess whether the two dimensional decision causes behavior spillovers on a subsequent lying decision. Our initial results indicate that simultaneous lying decisions lead to balancing of lying across dimensions whereas the sequential lying decision reveals a consistency in moral behavior. Currently, we are designing additional experimental tests to evaluate the policy implications of our findings for relevant institutional norms such as, for instance, tax compliance

Author(s): Franziska Heinicke, Diogo Geraldes
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals
Back to session: Honesty, Lying, and Cheating (SHORT)
ABSTRACT:

Our experimental game investigates situations where one person has influence over another person, who could cheat on their behalf. To investigate these situations, we conduct one-shot two-stage laboratory experiments. In the first stage of the experimental treatments, principals can attempt to influence the agents' actions, either monetarily or verbally (by sending an anonymous written message). In the second stage of the game, agents perform the Fischbacher and Foellmi-Heusi 'die-in-the-cup' task. The reported die roll determines the principal's payoff. Not surprisingly, we find that agents are least likely to cheat for their principals in the control treatments, where principals have no influence over the agents. We distinguish between competitive and non-competitive payment schemes for the principal. Interestingly, although competition affects the amount of pressure principals attempt to exert over their agents, the agents do not per se seem to internalize the competitive pressure faced by their principals.

Author(s): Astrid Dannenberg, Elina Khachatryan
Topic: Social Behavior: Lying and Cheating, Social Behavior: Communication

It's lie o'clock: Honesty under time pressure revisited

Simeon Schudy
LMU Munich

ABSTRACT:

Immoral behavior of individuals may result from a deliberative cognitive process or from impulsive actions. So far, only a few studies have systematically investigated to what extent time pressure causally affects individual dishonesty and the evidence is mixed. Using a parsimonious laboratory experiment we study how time pressure affects the likelihood of misreporting in a die rolling paradigm when i) the liar or ii) somebody else benefits from misreporting. Further, we vary whether misreporting opportunities are more or less easy to spot. In addition, we conduct a replication study of an experimental design implemented earlier in the literature. Our results suggest if at all weak effects of time pressure on misreporting.

Author(s): Martin Kocher and Simeon Schudy
Topic: Social Behavior: Lying and Cheating, N/A

Subjective and Objective Skill Evaluation

Martin Vollmann
University Heidelberg

ABSTRACT:

In many situations, self-perception and perception by others diverge. Such differences can play a crucial role in corporate governance settings, for example in the context of task allocation and promotions. If an employee has a history of accomplishments, she develops beliefs over her abilities. Similarly, her supervisor observes the same history. Both parties will form beliefs about the employee's skill and future performance. Are these beliefs congruent? The development of skill beliefs and the difference between beliefs about own performance and someone else's performance, as well as the consequences of these beliefs for performance-related decisions, are the focus of this paper. We conduct an experimental study in which a performer has to answer an incentivized sequence of quiz questions while being observed by an observer. Both parties provide beliefs about the performance before each of the questions. After 15 questions, both
performers and observers are presented with a decision between having an additional payment based on either the performers success in a 16th quiz questions, or a random lottery with an underlying winning probability matched on the performer's individual performance in the first 15 questions. We implement a treatment variation by having participants randomly allocated to quizzes of different degree of difficulty. We find no convergence of the performer's and the observer's beliefs. Observers on average predict the ability of performers correctly, while the performers systematically underestimate their performance (strategic reasons for misrepresentation are excluded by design). The underconfidence of the performers is mostly driven by high-scoring performers. However, in the decision to bet on skill or chance in round 16, the performers favor the skill based task over the lottery payment on an absolute level (p<0.001, two-sided t-test) and on a relative level compared to the observer (p<0.01, two-sided t-test). In comparison we find no preference for the observer (p=0.708, two-sided t-test). We discuss the implications in terms of the competence hypothesis in decision under uncertainty and the overconfidence literature. Keywords: Performer perception, observer perception, Overconfidence, corporate governance

Author(s): Stefan Trautmann, Martin Vollmann
Topic: Applied Economics: Labor Market, N/A

Probability Distortions as Incentives

Victor Gonzalez Jimenez
University of Vienna

ABSTRACT:

This paper introduces a novel incentive scheme designed to exploit the regularity that individuals distort probabilities in a systematic way. Under the proposed scheme, the worker is incentivized to perform a task with a lottery that offers two outcomes: a monetary prize, with a size that increases with the worker's performance on the task, and zero. The principal is able to specify the probability that the monetary prize is paid and makes this decision before the worker performs the task. Therefore, the probability chosen by the principal has the capacity to influence the worker's decision about how much output to deliver. A theoretical framework and a laboratory experiment demonstrate that the proposed incentive scheme outperforms a traditional incentive scheme when both offer similar monetary incentives. However, the probability specified by the principal is critical to achieve this effectiveness: Small probabilities yield higher performance, whereas medium and high probabilities yield no performance differences. I demonstrate that the way in which individuals distort probabilities and the degree of such distortion explains these findings.

Author(s): Victor Gonzalez-Jimenez

Discretion in Workload Management: an Experiment on Attention Allocation and Performance

Veronica Rattini
University of Pittsburgh

ABSTRACT:

The present research investigates how individuals allocate their attention when they are incentivized to solve multiple cognitive tasks in a framed field experiment. The experiment includes two treatments, each providing different degrees of flexibility on how to complete this effort allocation problem. In the control group, individuals have full discretion. The first treatment prevents multitasking by restricting subjects to follow a fixed sequence of the tasks. Under the second treatment, individuals have still discretion on the task-ordering, but not on the time allocation. The results are interpreted by using the data collected through the mouse-click tracking technique. The empirical evidence suggests that, in this setup, it is advantageous for subjects to prioritize the easy tasks over the difficult ones. Moreover, frequent task-
switching is negatively associated with performance. Results on the treatment effects suggest that, by restricting individual decisions, it is possible to improve the achievement of certain types of subjects significantly. However, these potential benefits are mediated by the costs imposed on the complementary groups. Overall, the findings suggest that workers' discretion is a crucial factor for productivity and the optimal job design, especially when different types of workers are employed.

Author(s): Veronica Rattini
Topic: Applied Economics: Labor Market, N/A
Link: https://www.dropbox.com/s/nx1bhd0mcksbr2x/secduling_vr_wp.pdf?dl=0
Back to session: Incentives 1

Incentive to Persevere

Elif Incekara Hafalir
University of Technology Sydney

ABSTRACT:

To achieve success often requires persistent efforts. We conduct two randomized controlled trails to test the effectiveness of an all-or-nothing rewarding mechanism aimed at incentivising a full completion rate of repeated tasks over a period of time. We find the full completion rate under the all-or-nothing mechanism does not differ from that under the regular piece-rate mechanism. However, when given the option between the all-or-nothing and the piece rate mechanisms in a self-select treatment, a significant amount of participants chose the all-or-nothing mechanism in spite of the risk. The overall full completion rate is significantly higher in the self-select treatment than the piece rate condition. Our results highlight the importance of autonomy in incentivising persistent efforts.

Author(s): Elif Incekara Hafalir, Grace Lee, Andrey Siah, Erte Xiao,
Topic: Field Experiments: General, Decision Theory: Preferences
Back to session: Incentives 2

Exercising More with a Matched Bet

Andrej Woerner
University of Amsterdam

ABSTRACT:

Using a field experiment, I study a new commitment device designed to help people stick to their exercising goals. The device is a matched bet that satisfies strict budget balancedness. In a theoretical model I show that offering a matched bet helps both sophisticated and naive procrastinators. My experimental results confirm my theoretical predictions. Offering a matched bet has a significant positive effect on gym attendance. The effect is largest for people who procrastinated exercising in the past. Overall, the matched bet proves a promising device to help people exercise more. I also discuss how a matched bet could be applied to other areas such as smoking cessation, weight loss and academic performance.

Author(s): Andrej Woerner
Topic: Field Experiments: General, Markets: Market design and Matching
Back to session: Incentives 2

You get what you pay for - The effect of incentives on quality and quantity in an experimental real-effort task
ABSTRACT:

Organizations across all industries face a common problem, when they try to incentivize their employees. Typically, incentives will only affect one of at least two dimensions of the produced output: quality or quantity. Surprisingly little is known about the effect on the not incentivized dimension. In this paper we present a novel experimental design to measure the effects of monetary incentives on the quantity and the quality of participants' output in a real effort task. We find that both dimensions of output can be successfully incentivized, without inevitably reducing efforts in the not incentivized dimension. This effect holds also for the two-dimensional incentives for quantity and quality. Incentivizing an additional dimension, however, does not come for free, and gains in productivity and increased output value do not necessarily cover all additional costs.

Author(s): Thomas Lauer, Yannik Diebel
Topic: Applied Economics: Labor Market, N/A
Back to session: Incentives 2

Team Incentives, Productivity and Choices: A Real-time Real Effort Experiment

Maoliang Ye
Harvard University

ABSTRACT:

Using a real-time real effort experiment, we study how group threshold and within-group distribution methods (equal sharing, proportional, and winner-takes-all) together affect workers productivity, as well as their voting regarding distribution methods. Our results show that equal sharing significantly outperforms winner-takes-all in team productivity because it boosts productivity of low-skill workers but does not harm that of high-skill workers. Group threshold affects neither team productivity nor the role of distribution methods in deciding productivity. Proportional is the most popular voting choice; very few vote for winner-takes-all. Those with threshold vote for Equal more frequently than those with no threshold. Those previously assigned to the proportional distribution votes proportional more than those previously assigned to equal sharing. Those whose distribution method performs worth than others are more likely to vote for change, but only with no threshold.

Author(s): Richard B. Freeman, Xiaofei Pan, Xiaolan Yang, Maoliang Ye
Back to session: Incentives 2

Detail-Oriented Women Wanted: The roles of gender and socio-emotional skills signals in the labor market

Efsan Nas Ozen
University of Bologna

ABSTRACT:

Employers value generic cognitive skills, such as literacy or numeracy, technical skills, and socioemotional skills. While employers can rely on educational attainment or technical certifications of prospective workers as signals of cognitive and technical skills, socioemotional (or social) skills are more difficult for employers to assess and for job seekers to signal. The signaling of socioemotional skills can be particularly important for women, who experience high rates of joblessness or long-term unemployment. This study investigates whether signaling socioemotional skills can increase
women's chances of getting hired by compensating gender inequalities in educational attainment or work experience. To identify the role of socioemotional skills signals in hiring decisions and its potential interaction with gender biases, we conduct a large-scale randomized audit study. Sending fictitious CVs with randomized treatments to real job openings, we collect a unique dataset: The available data on the online job portal together with the callback data allows us to see 1) whether the candidate appeared in the list after the employer filtered the candidates, 2) whether the employer clicked on the candidate's profile, and 3) whether the employer called the candidate to invite for an interview. We are thus able to pinpoint at which stage, if any, different CV characteristics including gender and socioemotional skills, come into play during screening.

**Author(s):** Efsan Nas Ozen, Stefan Hut, Victoria Levin, Ana Maria Munoz Boudet  
**Topic:** Applied Economics: Labor Market, Field Experiments: General

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### First Food, then Morals - The Effect of Food-Deprivation on Social Preferences

**Patrick Ring**  
Kiel Institute for the World Economy

**ABSTRACT:**

The proverb 'First food, then morals' by Bertolt Brecht suggests that social preferences may vary with one's metabolic state. We provide an experimental analysis of this proverb by investigating how social preferences are altered by the physiological and emotional state associated with food deprivation. In our study, subjects had to refrain from eating for 18 h to evoke a visceral state of food deprivation. In order to measure different aspects of social preferences, we conducted a standard economic task battery, to observe changes in cooperation, sharing, bargaining, trusting and lying. We find evidence that food deprived subjects are less cooperative and trustworthy. They lie more frequently and share less. Further, they are willing to accept lower offers. We find not only social preferences, but also the compliance to social norms to be impacted by food deprivation. We conclude that social preferences are influenced by physiological and emotional states.

**Author(s):** Jan S. Krause, Patrick Ring, Kerrin Schlichting and Ulrich Schmidt  
**Topic:** Psychology and Biology: Neuroeconomics, Social Behavior: Other-regarding Preferences

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### Personality Traits and Household Consumption Choices

**Chiara Rapallini**  
Universita di Firenze

**ABSTRACT:**

In this paper we estimate the effect of personality traits on individual and household consumption choices. To this aim, we use 2009 and 2010 waves of the German Socio Economic Panel (GSOEP) and we estimate a system of individual Engel curves for a sample of 2,284 singles and a system of household Engel curves for a sample of 1,921 childless couples. For the sample of couples, we adopt both a unitary model and a collective Engel curve system. In the latter case, personality traits are considered among the distributional factors and their influence on the distribution of resources within the family is estimated. Preliminary results show that for both male and female singles the Openness trait predicts an increase on the share of the budget devoted to cultural expenditure, and a decrease of food at home expenditure. For the sample of couples, we find not only social preferences, but also the compliance to social norms to be impacted by food deprivation. We conclude that social preferences are influenced by physiological and emotional states.
expenditure is predicted to increase when the spouses are both high in the Openness trait, like the consumption of food out home when they are both high in the Extraversion trait. Adopting the collective consumption model we estimate a sharing rule which is in average 57 percent in favor of the male partner. The female bargaining power in the allocation of the household consumption is predicted to increase if the wife is relatively more conscientious with respect to her husband, or relatively more extravert, and to decrease if she is relatively more neurotic, or relatively more agreeable. Finally, we can show that the effect of spouses' personality on household consumption choices is not imputable to the assortative mating in the marriage market. In fact, the average correlations of the matching indices among personality traits, education and wage are quite low and not statistically significant. This is verified even if the couples of the GSOEP are matched for each of the Big-five personality traits, as well as for the education level and the wage, and even if the personality is correlated with the education and the wage at the individual level.

Author(s): Lucia Mangiavacchi, Luca Piccoli, Chiara Rapallini
Topic: Psychology and Biology: Gender and Individual Differences, Applied Economics: Other

The Effect of Personality Traits on Productivity: Replication and Extension

Andreas Ortmann
UNSW

ABSTRACT:

We identify and quantify the relationship between individuals' personality traits and their productivity using an experimental setting. Are individuals with certain personality traits more productive than others? And if so, how does the incentive scheme or nature of the task change this relationship? We replicate first an experiment by Cubel et al. (EJ 2016), who found a significant relationship between individuals' Big Five personality traits and their productivity. By introducing a different incentive scheme and by changing the nature of the task, we then examine the robustness of their findings. We cannot replicate the results found in Cubel et al. (2016). Our failure to replicate their results could be due to the method of replication, sample size, and/or sampling variation. Regarding our incentive scheme variation, we find -- as predicted -- that it motivates the productivity of individuals with higher levels of Extraversion differently. Regarding task variation, we do not find a significant relationship between personality traits and productivity, contrary to what we conjectured.

Author(s): Dechter, Luo, Ortmann
Topic: Applied Economics: Labor Market, N/A

The Influence of Self and Social Image Concerns on Lying

Zvonimir Basic
University of Bonn

ABSTRACT:

We investigate the influence of self and social image concerns as potential sources of lying costs. In a standard die-rolling experiment (Fischbacher and Foellmi-Heusi, 2013), we exogenously manipulate self-awareness and observability, which mediate the focus of a person on their private and public self, respectively. First, we show that an increase in self-awareness has no effect on reporting private information, although our manipulation successfully increases subjects' self-focus. This suggests that self-image concerns may be less important than previously hypothesized in the literature on lying costs. Second, we show that increasing subjects' observability, while still maintaining private information, decreases significantly subjects' reports. We finally show in a survey experiment that respondents believe that the likelihood of a lie increases with the reported outcome and attribute negative traits to people who make high reports. This further supports reputational concerns as the explanation behind the results of our social
Scarcity and Cheating: Evidence from Changes in Food Stock

Suparee Boonmanunt
Mahidol University

ABSTRACT:

We study the effect of food stock on cheating. We recruit low-income rice farmers from 48 villages in Thailand, whose main dish comes from their annual rice harvest. We use a 2x2 between-subject design - we randomly assign the participants to an experiment either before or after a rice-harvest and use either a baseline or norm treatment. In the baseline treatment, participants are asked to randomly draw, in private, one out of ten numbers (from 1 to 10) from an envelope, and then report the number. They receive a payoff which depends only on the number reported, which creates an incentive to cheat. In the norm treatment participants are informed, in addition, that the majority of rice farmers find cheating for one's own benefit unacceptable. We find that before harvest, rice farmers cheat in both baseline and norm treatments. After harvest, rice farmers cheat in the baseline treatment but, interestingly, do not cheat in the norm treatment. Our results suggest that social norm can be an effective tool to reduce cheating when people feel food-secured. The tool is ineffective when facing food-insecurity.

Author(s): Suparee Boonmanunt, Agne Kajackaite, Stephan Meier
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals
Back to session: Lying 1: norms and image

Social Comparison and (Dis)Honest Behavior

Matthias Praxmarer
MPI Gemeinschaftsguter/University of Cologne

ABSTRACT:

Humans frequently engage in social comparison and it affects behavior in various ways. Further, we do know that social comparison activates the same reward-related brain areas as monetary incentives. Despite the large literature on dishonest behavior, research on the impact of social reference points like a reference wage on lying is scant and provides ambiguous results. In this project, we investigate whether and how social comparison affects honesty by varying the level of the social reference point and keeping monetary incentives of dishonest behavior constant. We introduce a treatment where participants are more likely to be better off than their peers and another treatment where participants are more likely to be worse off than their peers, before decision makers had the possibility to increase their earnings with lying. Therefore, we implemented an observed version of the die roll game where payments in Euro are equal to the reported outcome of the die roll. The observed version allows us to track individual behavior and to disentangle different motivations of dishonest behavior. While we do observe more dishonest behavior when decision makers are confronted with a high peer income, motivations behind dishonest behavior are different. They range from income maximization to equalizing payoffs.

Author(s): Matthias Praxmarer
Topic: Social Behavior: Lying and Cheating, N/A
Back to session: Lying 1: norms and image
Willful Ignorance and the Ethics of Algorithms

Johanna Jauernig
Leibniz Institute of Agricultural Development in Transition Economies (IAMO)

ABSTRACT:

Algorithms have become an integral part of many areas of life - be it in online shopping, dating platforms, or recidivism prognosis in law enforcement. They come with huge advantages, such as being highly adaptive to new data and also being transparent since arbitrariness of human decisions is ruled out. Transparency is commonly considered as one important tool to combat phenomena of corruption (Kolstad & Wiig, 2009). However, we know from experiments that transparency is a double-edged sword. In some situations people want to remain ignorant to certain facts, even if the knowledge would be costless (Dana et al. 2007). Grossman & Van Der Weele (2017) show that willful ignorance helps to maintain a favorable self-image. We study the phenomenon of willful ignorance in context of algorithms as mechanisms with complete transparency. In our research design subjects get monetary benefits depending on parameters such as own performance, performance relative to others and luck. We manipulate the degree of transparency between subjects. Against this backdrop, we want to investigate the following behaviors and attitudes: Which setting do subjects prefer (over time)? Do subjects optimize the tradeoff between ignorance and information? Which parameters influence preference for/against transparency? Does the degree of transparency influence subjects' self-esteem and happiness?

Author(s): Johanna Jauernig (Matthias Uhl)
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals

Can promises reduce cheating in the absence of punishment?

Jan Kristian Woike
Max Planck Institute for Human Development

ABSTRACT:

Promises can generate trust and scaffold cooperation. Yet, it has been claimed that words are cheap talk and easy to be broken in the absence of punishment, and that most people tend to lie (at least a little), when it improves their personal gain. We used a novel approach to study the effect of promises on cheating behavior (N=776): Participants first played a variant of the dice-rolling game in two conditions. In the control condition, participants chose between a higher and a lower payment rate without further consequence. In the promise condition, participants could only choose the higher payment rate when they promised to truthfully report their dice rolling results. We show that over-reporting in the promise condition was lower than in the control condition and further, that over-reporting correlates with demographic and personality variables. After the dice rolling game participants played a novel two-dimensional sender-receiver game, in which they played the role of sender and had the opportunity to add a voluntary promise, affirming the correctness of their message. A second group of participants were randomly assigned to the receiver role and acted upon a sender's message with consequences for both players' payoffs. We analyze the effect of the senders' promises on the receivers' behavior, demonstrate a relationship between the sender's behavior in the sender-receiver game and the dice-rolling game, as well as correlations with personality measures and the PANAS scale. Findings are supported by qualitative data such as open explanations given by participants. Current extensions of the paradigm are discussed.

Author(s): Jan K. Woike, Patricia Kanngiesser
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals

Cheating in one shot vs repeated task

Back to session: Lying 1: norms and image
Back to session: Lying 2: spillovers
ABSTRACT:

A metastudy by Abeler et al. (2016) shows that playing a cheating task repeatedly does not induce a significant change in behavior. This finding is counterintuitive as repeating the task can make dishonesty recognizable at the individual level, thereby inducing a higher cost of cheating (via reputation). However, a direct test of the one-shot vs. repeated cheating design is missing in the literature. In this paper we present a clean experimental design that simulates rolling a dice once vs 10 times avoiding potential confounds implied by a different minimum amount of cheating. We show that indeed the average degree of cheating does not significantly change across experimental conditions as a result of two different effects that offset each other. On the one hand, the repetition of the task prevents (almost) all the subjects from fully exploiting the opportunity because of social image concerns. On the other hand, cheating behavior becomes more widespread.

Author(s): Sandro Casal; Antonio Filippin
Topic: Social Behavior: Lying and Cheating, Games: Repeated Games

The spillover effects of monitoring institution on unethical behavior across contexts

Fabio Galeotti
University of Lyon

ABSTRACT:

We report on a field experiment conducted in public transportation and on the streets of a large city to study whether there are cross-context spillover effects of monitoring and punishment institution on unethical behavior. In the experiment, we first observe dishonesty in a natural setting (fare evasion in public transport), and then we expose subjects to an opportunity for unethical behavior in a different setting (accepting undeserved money on the street). This enables us to test (i) whether sanctioning fraud has a deterrence effect on fare-dodgers when they are exposed to a new opportunity to misbehave, and (ii) whether being inspected has any effect on the behavior of honest passengers in the new context. Our results show that monitoring increases the unethical behavior of both fare-dodgers and non-fare-dodgers in the second unrelated context. The crowding-out effect of monitoring across contexts increases in the number of inspectors. Our experiment rules out traditional explanations related to negative reciprocity which are typically proposed in single-context settings, and shows the importance of considering the spillover effects of institutions across contexts.

Author(s): Fabio Galeotti, Valeria Maggian, Marie Claire Villeval
Topic: Social Behavior: Lying and Cheating, Field Experiments: General

The Effects of Self-Serving Altruistic Dishonesty on Trust

Thijs Brouwer
Tilburg University

ABSTRACT:

This paper examines how dishonest behavior that is beneficial to a passive other affects the passive beneficiary's trust towards the decision maker. Such acts arguably impose a moral dilemma on the passive beneficiary: she could either appreciate the beneficial aspect of the act and become more trusting as a result; or she could object to the dishonest nature of it and become less trusting of the dishonest decision-maker. Which of these two forces prevails forms the main
question of this study. In my experimental design, three players -- two informed, one uninformed -- engage in a two-stage game, with an opportunity for one of the informed players to behave dishonestly towards the uninformed player to the benefit of both informed players. Informed players subsequently engage in an economic game -- the so-called Moonlighting Game -- in which trust plays an important role. This design allows me to measure the degree of trusting and trustworthiness among beneficiaries. I find that following both dishonest and honest behavior, trust of the informed player towards the decision-maker is decreased, as compared to a neutral situation in which no moral dilemma was imposed on the informed players. Restricting the sample to subjects that exhibit at least a minimal degree of internal consistency in the Moonlighting Game shows that, if anything, honest behavior decreases trust among the passive beneficiary, compared to both dishonest behavior and the neutral case. With this study, I am the first to document that being faced with a moral dilemma per se, irrespective of actual behavior, can erode trust between players.

**Author(s):** Thijs Brouwer

**Topic:** Social Behavior: Lying and Cheating, Social Behavior: Other-regarding Preferences

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**The Truth about Lies. A Meta-Analysis on Dishonest Behavior**

**Philipp Gerlach**
**Max Planck Institute for Human Development**

**ABSTRACT:**

Over the past decade, a large and growing body of experimental research has analyzed dishonest behavior. Yet the findings as to when people engage in (dis)honest behavior are to some extent unclear and even contradictory. A systematic analysis of the factors associated with dishonest behavior thus seems desirable. This meta-analysis reviews four of the most widely used experimental paradigms: sender-receiver games, die-roll tasks, coin-flip tasks, and matrix tasks. We integrate data from about 500 experiments (N > 30,000 choices) to address many of the ongoing debates on who behaves dishonestly and under which circumstances. Our findings show that dishonest behavior depends on both situational factors, such as reward magnitude and externalities, and personal factors, such as the participant's gender, age, and study major. Further, laboratory studies are associated with more dishonesty than field studies. To some extent, the different experimental paradigms come to different conclusions. For example, the rate of liars in die-roll tasks and matrix tasks is relatively similar, but participants in die-roll tasks lie to a considerably greater degree. We also find substantial evidence for publication bias in almost all measures of dishonest behavior. Future research on dishonesty would benefit from more representative participant pools and from clarifying why the different experimental paradigms yield different conclusions.

**Author(s):** Philipp Gerlach, Kinneret Teodorescu, Ralph Hertwig

**Topic:** Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals

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**Pre-planning and its Effects on Repeated Dishonest Behavior: An Experiment**

**Subhasish Modak Chowdhury**
**University of Bath**

**ABSTRACT:**

We investigate experimentally the effects of the opportunity to pre-plan one's action on dynamic (im)moral decision makings, more specifically, whether it invites more consistent or compensatory behavior. There were two treatments where either the subjects were informed ex-ante that they would have two sequential opportunities to tell lies for monetary gains, or they were informed about the opportunity to tell a lie only prior to each stage. We find that when it was not possible to pre-plan, repeated opportunities to tell a lie resulted in subjects telling a lie even for a smaller monetary gain, i.e., they got more vulnerable to a temptation to behave dishonestly. However, when pre-planning was
possible, the proportion of subjects telling a lie was relatively high in the first stage, and then it declined sharply in the
next stage. We argue that the possibility of pre-planning invites a compensatory, instead of consistent, action, and thus
induced more dishonest responses in the first stage and fewer in the second. Overall ' considering both stages ' more
subjects told lies with the opportunity to pre-plan.

Author(s): Subhasish M. Chowdhury (University of Bath), Chulyoung Kim (Yonsei University), Sang-Hyun Kim
(Yonsei University)
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals
Link: https://sites.google.com/site/subhasishmc/file/Pre-plan.pdf
Back to session: Lying 3

Lying about luck versus lying about performance

Agne Kajackaite
WZB

ABSTRACT:
I compare lying behavior in a real-effort task in which participants have control over outcomes and a task in which
outcomes are determined by pure luck. Participants lie significantly more in the random-draw task than in the real-effort
task, leading to the conclusion that lying about luck is intrinsically less costly than lying about performance.

Author(s): Agne Kajackaite
Topic: Social Behavior: Lying and Cheating, N/A
Back to session: Lying 3

Lying to a liar: The effect of within-group reputation on moral behavior

Florian Kerzenmacher
Frankfurt School of Finance & Management

ABSTRACT:
Individual lying behavior is best explained by theories combining (intrinsic) lying costs and (external) reputation
concerns. We argue that the impact of reputational concerns not only depends on the assessment of an individual's
honesty but also on the individual's belief about the assessor's honesty. In particular, this will be the case when the
individual and the assessor form a team. In a first step, we propose a theoretical framework where an individual's
reputation costs are higher towards an honest team member compared to a dishonest team member. Then, we test the
theoretical predictions experimentally in a sequential game. We find that lying among second movers decreases
significantly when the first mover is assumed to be an honest person compared to the case when the first mover has lied
with a positive probability.

Author(s): Florian Kerzenmacher
Topic: Social Behavior: Lying and Cheating, Social Behavior: Group Behavior
Back to session: Lying 3

(Dis)advantage, fraud and other-regarding behavior

Johan Birkelund
johanbirkelund@uit.no
ABSTRACT:
This paper reports on an experiment that investigates how inequality in opportunity shapes fraudulent behavior and social preferences among the advantaged and disadvantaged. In a two-stage experiment, subjects first earn money according to self-reported productivity, which can include honest and dishonest reports. Subjects then play the dictator game and decide how much, if any, of their earnings to share with an anonymous recipient. Treatments investigate how equal and unequal advantages in the production affect the rate and extent of fraudulent reports in the first stage and subsequent offers in the second stage. Findings show that advantages in production matters. When advantage is shared by all, people exhibit significantly less fraudulent behavior and significantly more other-regarding behavior. But, when advantage is randomly enjoyed by some, the disadvantaged people commit significantly more fraud and significantly less other-regarding behavior.

Author(s): Johan Birkelund and Todd L. Cherry
Topic: Social Behavior: Lying and Cheating, N/A
Back to session: Lying 4: lying and taxes

The supply of undeclared work - Evidence from a natural field experiment

Sarah Necker
Walter Eucken Institute

ABSTRACT:
This study reports the results from a natural field experiment on how the number of offers and the due price change when consumers ask for an invoice, i.e., signal that they want to demand declared work. We post job advertisements for painting and floor installation services in two German online marketplaces which differ in the degree of regulation. We randomly manipulate the contract conditions communicated to almost 3,000 interested contractors. We find that 56% of contractors proposed a price assuming that the transaction will not be declared to tax authorities (non-declarers). An increase in the proposed price by 100 Euro increases the likelihood that the contractor intends to refrain from declaration by 4ppts. While non-declarers are almost absent in the regulated market, the rate of non-declarers is 73% in the unregulated market. The price of non-declarers is up to 26% lower than the price of declarers. Hence, consumers can save more if they demand undeclared work than if they use the German tax subsidy of 20% for demanding declared work.

Author(s): Annabelle Doerr, Sarah Necker
Back to session: Lying 4: lying and taxes

The effect of whistleblowing policies on internal reporting and lying behavior

Caroline Stein
University of Cologne

ABSTRACT:
In the past decades, prominent cases across various fields of society have proven how important whistleblowing can be in order to disclose persistent wrongdoing in organizations that harms society and would be otherwise very costly to detect. However, especially employees usually have also the opportunity to report observed misbehavior to superiors in their organization. For the organization internal reporting channel often comes at lower costs than whistleblowing. As internal reporting is hard to observe, however, it is not clear how effective it can be to actually sanctioning wrongdoing. In this paper, we investigate how effective internal reporting is and whether this, in turn, depends on the whistleblowing environment. We consider a group of six players that is matched to another pair that we call the public. All group members have an option to lie for their own interest, which has, however, negative consequences for the public. Each
group member can observe one other group member and decide whether or not she wants to report an observed lie to a sanctioning authority at a small cost. A reporting would then lead to a sanction for the wrongdoer and full redemption for the affected public only if the requested authority decides to enforce those consequences. For our baseline comparison, we vary the options for the group members to which sanctioning authority they can report a lie. In a baseline treatment, they only can report to their own group members. In a second treatment we add the external reporting channel, where group members can also report to the public immediately or after the internal reporting has not succeeded. In a next step we introduce two more treatments and vary the consequences of whistleblowing to create a more realistic environment. We analyze how these two consequences affect internal reporting and the overall amount of sanctioned wrongdoing. Specifically, we consider two situations where external whistleblowing either initiates a group-wide investigation or creates additional damage to all group members. As a first finding we see that the overall fraction of reporting remains the same. The channel the group members use, however, completely shifts to external. Thus the provision of an external reporting channel does not increase reporting but only makes it more effective, because the external authority is more likely to enforce sanctions. Secondly, we find that if the external reporting channel creates damage to the whole group, the usage of the external whistleblowing not only drops, but also the fraction of reporting overall decreases. Thus in this case, when whistleblowing leads to a general damage for the organization, group members would not switch back to internal reporting, but refrain from reporting at all. As a result in an environment where whistleblowing harms the whole organization it has no advantage compared to a situation where only internal reporting is possible. In contrast, we find that an environment where whistleblowing is followed by a group-wide investigation does not only create a higher number of sanctioned wrongdoings but also decreases lying in the first place.

Author(s): Bernd Irlenbusch, Ernesto Reuben, Caroline Stein
Topic: Social Behavior: Lying and Cheating, Social Behavior: Norms and Morals

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Less Cheating? The Effects of Prefilled Tax Returns on Compliance Behavior of Taxpayers

Martin Fochmann
University of Cologne

ABSTRACT:
As a consequence of the digital transformation, taxpayers are more often confronted with prefilled tax returns instead of blank forms. In a controlled experiment, we investigate how prefilled tax returns impact compliance behavior. We show that prefilled tax returns have a significant influence on compliance behavior and consequently on tax revenues. If tax returns are correctly prefilled, we find that individuals are more tax compliant. However, in cases of an incorrect prefilling, our results suggest that prefilling can have reverse effects. If prefilled income is lower than true income, individuals tend to reduce tax compliance compared to correctly prefilled tax returns. In contrast, if prefilled income is higher than true income, no additional influence on compliance behavior is observed. Our results suggest that prefilled values serve as anchors when taxpayers file their tax return. Our findings offer insights and practical implications for the application of digital tax filing processes.

Author(s): Martin Fochmann, Nadja Muller, Michael Overesch
Topic: Social Behavior: Lying and Cheating, Applied Economics: Other

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Breaking-Up: Experimental insights into international economic (dis)integration

Lukas Hohl
Universitaet Basel

ABSTRACT:
Trade theory stipulates that countries prosper when their members choose to economically integrate with other...
countries. But recent events - 'Brexit' and the independence vote in the Spanish region of Catalonia - indicate a growing desire for economic disintegration. Here we report results of a laboratory investigation of how size and distribution of gains from economic integration affect cohesiveness and outcomes in an integrated economy, and individuals' choice to leave it.

Author(s): Gabriele Camera, Lukas Hohl and Rolf Weder
Topic: Games: Coordination, Markets: Macroeconomics
Back to session: Macro Experiments

Endogenous Market Formation and Monetary Trade: an Experiment

Gabriele Camera
Economic Science Institute, Chapman University

ABSTRACT:

The theory of money assumes decentralized bilateral exchange and excludes centralized multilateral exchange. However, endogenizing the exchange process is critical for understanding the conditions that support the use of money. We develop a ''travelling game'' to study the spontaneous emergence of decentralized and centralized exchange, theoretically and experimentally. Players located on separate ''islands'' can either trade locally, or pay a cost to trade elsewhere, so decentralized and centralized markets can both emerge in equilibrium. The latter maximize trade meetings and are socially efficient; the former minimize trade costs through the use of money. In the laboratory, centralized exchange more frequently emerges when subjects perform diversified economic tasks, but also when they interact in large groups. This shows that to understand the emergence of money it is important to amend the theory of money such that the market structure is endogenized.

Author(s): Gabriele Camera, Dror Goldberg, Avi Weiss
Topic: Games: Coordination, Markets: Macroeconomics
Back to session: Macro Experiments

Are sunspots effective in a big crowd? : Evidence from a large-scale bank run experiment

Anita Kopanyi-Peuker
University of Amsterdam

ABSTRACT:

Coordination problems can have severe consequences for an economy. Whether currency attacks or bank runs eventually happen not only depend on the fundamentals, but also on agents' beliefs about others' actions. However, these beliefs might be affected by a sunspot variable (a commonly observed random variable, which is completely unrelated to the fundamentals), providing coordination device for agents. With this project we investigate whether sunspots effectively help people to coordinate in a bank run problem with a large number of participants, and how the payoff structure influences behavior. Our setup is similar to Arifovic and Jiang (2015) where subjects need to decide whether they wait or withdraw their money from the bank. Waiting gives higher payoff if enough people are doing so. Theoretically always waiting, always withdrawing, or coordinating based on the sunspot announcement are all equilibria of this repeated game. In this project we consider two group sizes: groups of 10 and 75-90. Furthermore, we vary the payoff of withdrawing, i.e. the relative attractiveness of the two actions. Our results show that large groups are more likely to end up in the 'run' equilibrium if payoffs are perceived too risky. However, coordination on waiting also happens in groups of 70-80 when waiting is sufficiently attractive. In that case all of our large and small groups coordinate on this action. In small groups we observe three types of behavior for the more risky environment: some groups coordinated on waiting, some on withdrawing, and some on the sunspot announcements.

Author(s): Jasmina Arifovic (Simon Fraser University), Cars Hommes (University of Amsterdam), Anita Kopanyi-
Planar Beauty Contests

John Duffy
University of California, Irvine

ABSTRACT:
We extend the Keynesian Beauty Contest game to a second dimension. In this new, 'planar beauty contest' game, groups of subjects are asked to simultaneously form guesses about two variables, X and Y, each in a closed interval [0, 100]. Average guesses matter for the realizations of the two target values for X and Y that subjects are incentivized to achieve, i.e., the system of equations is coupled. Such coupled systems represent a workhorse, reduced-form framework for many models in macroeconomics and other fields. Our planar beauty contest game provides a simple framework for understanding whether individuals can learn the steady state equilibria of such models and stands in contrast to "learning-to-forecast" experimental designs. Our main focus is on whether the eigenvalues of the induced two-dimensional system matter for whether or not subjects converge to the steady state solution of the two-dimensional system, as well as the learning process by which such convergence (or divergence) takes place. We find that groups of 10 subjects with full knowledge of the planar model's two equations are able to learn the steady state of such systems when the steady state exhibits the sink property (two eigenvalues less than one in absolute value) or the saddlepath property with negative feedback, (one eigenvalue less than unity while the other eigenvalue is greater than unity and negative). However, if the steady state exhibits the source property (two eigenvalues greater than one in absolute value) or the saddlepath property with positive feedback, (one eigenvalue is less than unity while the other eigenvalue is greater than unity and positive), then subjects are unable to learn the steady state solution of the system, and instead get stuck at boundary values of the admissible solution space. We find that several different learning approaches can explain these phenomena, with a simple adaptive expectations model providing the best fit across all four of our experimental treatments.

Author(s): Mikhail Anufriev (U Technology Sydney), John Duffy (UC Irvine), Valentyn Panchenko (U New South Wales)

Manipulation in prediction markets

Ro'i Zultan
Ben-Gurion University of the Negev

ABSTRACT:
Policy and commercial strategic decisions are often made under uncertainty. Organisations sometimes use market-based information aggregation mechanisms such as prediction markets as a tool to aggregate dispersed information, thus reducing uncertainty and improving economic decision making. When market participants only care about their profits in the market, markets tend to be successful at aggregating information. However, it is not clear that efficient market outcomes lead to efficient decision making. Furthermore, the expected effect of market outcomes on future decisions may distort market behaviour. In particular, when participants care about the decisions made based upon the market outcomes, there may be an incentive to try to manipulate the market prices. We study experimentally a two-stage process. First, agents are endowed with private information regarding the true state of the world, and trade state-contingent assets in a market. Next, all agents vote on whether to implement one of a set of policies, or maintain the status quo. Each of the policies is superior to the status quo in one state of the world, and inferior in the others.
different treatments, a minority of agents are either endowed with a strong preference for the status quo or for a policy they know to be detrimental to the majority. We test whether the minority traders are successful in injecting noise into the trading process in order to maintain the status quo (in the first treatment) and in pushing prices to support their preferred policy (in the latter treatment).

Author(s): Lawrence Choo, Todd R. Kaplan and Ro'i Zuitan
Topic: Markets: Other, Public Choice: Voting and Rent Seeking
Back to session: Market Behavior (SHORT)

An Experimental Comparison of Crowdfunding Mechanisms

Sander Onderstal
University of Amsterdam

ABSTRACT:
Crowdfunding has become an important fundraising practice but has received little attention in the economic literature so far. We introduce a new crowdfunding mechanism, the Generalized Moulin-Shenker mechanism (GMS), and show that, in theory, the GMS is a promising alternative to the prevailing All-Or-Nothing mechanism (AON). We then test our theoretical predictions in a lab experiment and compare the mechanisms' performance. Contrary to our theoretical predictions, we find that AON outperforms GMS, both from the producer's and society's point of view. Our findings are caused by a tendency of backers in GMS to underbid which prevails over time as effective feedback is very limited. This motivated us to explore a dynamic variant of GMS in the lab. The initial results suggest that this mechanism performs better than both the original GMS and AON.

Author(s): Andrej Woerner, Sander Onderstal, and Arthur Schram
Topic: Markets: Finance, Markets: Market design and Matching
Back to session: Market Behavior (SHORT)

Near-Continuous Time Auctions

Cary Deck
University of Alabama

ABSTRACT:
Previous auction experiments have found that behavior differs between theoretically identical auctions. Using a near-continuous time framework, our subjects gain far more experience with each auction institution than is possible with the traditional laboratory approach. Ultimately, we find evidence of a behavioral isomorphism between second price and English clock auctions and between first price and Dutch clock auctions. Further, we find evidence suggesting the curved bid functions typically observed in first price and Dutch clock auctions are the result of subjects learning about the distribution of market prices.

Author(s): Cary Deck, Bart Wilson
Topic: Markets: Auctions, Markets: Industrial Organization
Back to session: Market Behavior (SHORT)

Sanctions and Imitation of Virtuous Behavior Increase International Cooperation

Heike Hennig-Schmidt
Bonn University
ABSTRACT:
The effectiveness of punishment in sustaining cooperation has been questioned because of the endemic presence of antisocial punishment in some cultural areas (Hermman et al., Science 2008, Gaechter et al., PTRSB 2010). In this study we involve German and Russian individuals in 'collective risk social dilemma' (CRSD) (Milinski et al, PNAS 2006, PNAS 2008) games. This game captures the incentives of individuals faced with collective risks akin to climate change. In our CRSD, groups of individuals have to invest in a public fund to avoid the possibility of 'catastrophic' losses, equal to 75% of their savings, at the end of a 10-round interaction. In a standard CRSD, the existence of a 'safety threshold' is common knowledge. If the total amount of contributions to the fund is at least equal to the threshold, no loss will occur. If total contributions fall short of the threshold, then the 'catastrophe' will happen with certainty. In real life the threshold is however not certain. We therefore follow Barrett and Dannenberg (PNAS, 2012) and introduce uncertainty over the safety threshold. The loss is avoided with a probability proportional to the total amount of money that the group invests in the public fund. Theoretically, uncertainty in the threshold has the effect of shifting the game equilibria from a coordination game to a Public Goods Game (i.e. defection dominates cooperation). Germany is a country where typically punishment works efficiently to increase cooperation. On the contrary, in Russia punishment is typically detrimental (Gaechter et al., PTRSB 2010; Gaechter & Herrmann, EER 2011). In this way we can study the effectiveness of punishment when 'virtuous' cooperators meet 'failing' cooperators. Each CRSD is played by six individuals with three group members each from two different universities under eight conditions: (1)-(4): Intra-national with and without punishment in Russia and Germany; (5)+(6): Inter-national with and without punishment hiding the group members' nationality; (7)+(8): Inter-national with and without punishment revealing group members' nationality. We find that punishment is highly effective in increasing cooperation in both inter-national contexts and in national contexts within Germany. We do not find appreciable differences from revealing nationality or not doing so. We find convergence of results under punishment in mixed groups in that German participants lead Russian group members to cooperate more. At the same time Germans do not cooperate less than in intra-German sessions. We also find that individuals appear to be willing to pay a certainty premium to completely avoid uncertainty.

Author(s): Gianluca Grimalda, Alexis Belianin, Heike Hennig-Schmidt, Till Requate, Marina V. Ryzhkova
Topic: Games: Repeated Games, Social Behavior: Group Behavior
Back to session: Market Behavior (SHORT)

Avoiding Black Markets for Appointments at Public Offices

Rustamdjan Hakimov  
WZB Social Science Center Berlin

ABSTRACT:
Scheduling appointments is presented as a new application for market design. We consider a setting inspired by the scheduling of appointments to obtain a visa at German consulates. The current online booking system is based on first-come first-serve which allows scalpers to enter the market and sell slots to appointment seekers (called immediate system). An alternative system is developed and tested experimentally. This system collects applications for slots for a certain time period and then randomly allocates slots to all applicants (deferred system). We investigate the current and the novel procedure under conditions of low and high demand for slots. As predicted, scalpers profitably book and sell slots under the immediate system with high demand, but they do not make profits in the deferred system.

Author(s): Rustamdjan Hakimov, C.-Philipp Heller, Dorothea Kuebler, Morimitsu Kurino
Topic: Markets: Market design and Matching, N/A
Back to session: Market Behavior (SHORT)

Declining Prices Across Second-Price Procurement Auctions

Marion Ott  
RWTH Aachen University
ABSTRACT:

In four experimental second-price auction formats for procuring a good for which bidders have private uncertain valuations, we find declining auction prices across the four formats. Willingness-to-pay-willingness-to-accept disparity and reference-point shifts during auctions predict the order of the declining prices. We conclude that mechanisms influence the reference state, and that auctions that foster reference shifts lead to lower payments for the procurer. In particular, assigning a leading bidder position during the auction process leads to more aggressive bids. These results support and generalize findings on sales auctions.

Author(s): Karl-Martin Ehrhart and Marion Ott
Topic: Markets: Auctions, N/A
Link: http://www.game.rwth-aachen.de/global/show_document.asp?id=aaaaaaaaayfzyo
Back to session: Market Behavior (SHORT)

How do sellers benefit from Buy-It-Now prices in eBay auctions? - An experimental investigation

Radosveta Ivanova-Stenzel
Technische Universitaet Berlin

ABSTRACT:

Buy-It-Now (BIN, hereafter) prices enable buyers to purchase a good prior to an auction. We study a symmetric independent private value (SIPV) environment, in which we analyse experimentally how eBay sellers set (BIN), prices and whether they benefit from those prices. Thereby, we combine lab techniques with the real environment. We observe that the eBay auction format supports deviations from truthful bidding leading to auction prices substantially below those expected in second-price auctions. Moreover, information available on eBay explains how much prices of eBay auctions deviate from those based on true value bidding. Sellers adjust their BIN prices according to this information and increase their BIN price when facing a population of more experienced buyers, when observing a higher number of submitted bids or more last-minute bidding from at least one bidder. More experienced sellers also ask for higher BIN prices. Despite of the underbidding, we find that the eBay auction with BIN option is more efficient and generates significantly higher revenue compared to a standard eBay auction without BIN option.

Author(s): Tim Grebe, Radosveta Ivanova-Stenzel and Sabine Kroeger
Topic: Markets: Auctions, Markets: Industrial Organization
Back to session: Market Behavior (SHORT)

Selection in markets : An experimental approach

Henrik Orzen
University of Mannheim

ABSTRACT:

Experiments in industrial organization in which students assume the role of firms are often criticized due to concerns about external validity. There are several facets to this problem. In this paper we discuss one common line of reasoning that uses an evolutionary argument. The idea is that in 'real' markets competition favors firms that decide optimally and market forces eliminate firms that do not maximize profits. Therefore, it is safe to assume that firms that are still present in a market conform to the ideals of the rational choice model. To investigate the relevance of this claim to the validity of laboratory experiments we set up a deliberately complex market setting and compare behavior and market outcomes in two treatments. In the Baseline treatment subjects are allocated at random to markets of different sizes and then interact strategically by investing in production capacity and by competing in prices over several periods. Losses or poor
performance are distinct possibilities but do not lead to any selection effects. The Market Force treatment is identical except that subjects can now self-select into the market as long as they have sufficient liquidity and are expelled from the market if they do not. We examine sorting effects and market performance. In our setting we do not find strong evidence in favor of the market selection argument.

Author(s): Henrik Orzen, Sihong Zhang  
Topic: Markets: Industrial Organization, Methodology: Lab, Field and External Validity

Driving to the Beat: reputation vs selection in the taxi market

Sotiris Georganas  
City U London

ABSTRACT:

We report results from a field experiment involving taxi drivers in Athens, to investigate reputation mechanisms in markets for credence goods. RAs took 480 rides and recorded relevant aspects of service. Our design allows two main contrasts. First, we observe regular yellow cabs that have been selected by a hailing and reputation app, Beat. In a between-subjects design, we compare services offered by Beat-affiliated drivers when hailed through the app and when hailed in the street. We thus isolate the pure reputation effect, since reputation concerns are not relevant when the app is not in use. Second, we compare unaffiliated yellow cab drivers to Beat drivers without using the app. In that way we can estimate the size of the selection effect, since the two groups only differ in that Beat has selected the latter. Reputation dominates selection. Also, too much, rigid control by the matchmaking platform leads to professionals underusing relevant information and making suboptimal choices.

Author(s): Theodore Alysandratos, Sotiris Georganas, Matthias Sutter  
Topic: Games: Repeated Games, Markets: Other

Money is more than memory

Maria Bigoni  
University of Bologna, Italy

ABSTRACT:

Impersonal exchange is the hallmark of an advanced society and money is one key institution that supports it. Economic theory regards money as a crude arrangement for monitoring counterparts' past conduct. If so, then a public record of past actions or memory should supersede the function performed by money. This intriguing theoretical postulate remains untested. In an experiment, we show that the suggested functional equivalence between money and memory does not translate into an empirical equivalence. Monetary systems perform a richer set of functions than just revealing past behaviors, which are crucial in promoting large-scale cooperation.

Author(s): Maria Bigoni, Gabriele Camera, Marco Casari  
Topic: Markets: Macroeconomics, Social Behavior: Group Behavior  
Link: https://www.gate.cnrs.fr/IMG/pdf/memory-mar2016-jme.pdf

CO2 Trading: Design and Behavior
ABSTRACT:

In an experimental study, we investigate whether the existence of CO2 externalities lead to changes in trading behavior and how regulation responds to the existence of CO2 externalities. Participants in the role of producers have the opportunity to realize revenues by buying a certificate in a market in order to produce, which, however, creates a real-world CO2 externality. Participants in the role of judges have to regulate central market parameters. Our experimental treatments implement economically equivalent auction and price mechanisms and analyze how the presence of CO2 externalities affects market outcomes. We find that in the presence of a CO2 externality, judges are significantly more likely to restrict or prohibit trade, and producers are significantly less likely to buy, thus foregoing non-negligible monetary revenues. This is true for both the auction and the price mechanism. At the same time, the mechanisms lead to substantially different outcomes: The auction mechanism leads to low prices with voluntary reduction of CO2 emissions and higher producer rents. At the same time, the total reduction of CO2 emissions is larger with the price mechanism. The reason is that voluntary emission reduction makes room for emitters in auction mechanism, but not in the price mechanism.

Author(s): Ottmar Edenhofer, Axel Ockenfels, Peter Werner

Topic: Markets: Market design and Matching, Social Behavior: Norms and Morals

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Bubbles and Financial Professionals

Utz Weitzel
Radboud University Nijmegen

ABSTRACT:

The efficiency of financial markets and their potential to produce bubbles are central themes in the academic and professional debates. Yet, surprisingly, there is little experimental research on how the main protagonists, financial professionals, behave and contribute to price efficiency and asset bubbles. We run 38 lab-in-the-field experimental markets with 294 professionals and 48 lab markets with 384 students to investigate the impact of commonly accepted bubble-drivers and bubble-moderators on price efficiency. We find that markets populated by professionals are susceptible to mispricing and bubbles, though they are significantly more efficient than student markets. Both subject pools exhibit qualitatively similar patterns: bubble-drivers, like capital inflows or a high initial capital supply, drive market inefficiencies, while bubble-moderators, such as short selling or a low ratio of cash to asset-value, lead to high price efficiency. In a complementary survey with another 121 professionals and 124 students we show that cognitive skills and risk attitudes cannot explain differences in price efficiency. We conclude that real-world experience in financial markets is conducive to price efficiency, but does not fully eliminate the effect of bubbledrivers.

Author(s): Utz Weitzel, Christoph Huber, Jurgen Huber, Michael Kirchler, Florian Lindner, Julia Rose

Topic: Markets: Finance, Methodology: Lab, Field and External Validity

Link: https://www.dropbox.com/s/yoaz48an5acuwuc/Holt_Markets_FinProfs%20%28ESAsubmission%20%29.pdf?dl=0

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Strategy-Proofness Made Simple

Peter Katuscak
RWTH Aachen University

ABSTRACT:
There is a growing evidence that many people do not report their preferences truthfully in incentive-compatible mechanisms. One of the leading explanations is game complexity, manifesting itself through a large number of contingencies that a player needs to consider to see that reporting truthfully is weakly dominant. We propose a novel way of framing any incentive-compatible mechanism that aims to reduce the ensuing cognitive load on players. First, a player's reported type is used to determine opportunity sets of the other players, whereas reported types of the other players are used to determine the opportunity set of the player in question. Second, a player's private allocation is determined as (one of) the most preferred allocation(s) in her opportunity set according to her reported preference type. We then experimentally test whether this framing increases truthful reporting relative to ``standard'' frames using second-price auction, deferred acceptance, top trading cycles and random serial dictatorship. The results are to be obtained in the spring of 2018.

**Author(s):** Peter Katuscak and Thomas Kittsteiner  
**Topic:** Markets: Market design and Matching, Markets: Auctions

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**An Experimental Investigation of Price Dispersion and Cycles**

**Daniel Friedman**  
**UC Santa Cruz**

**ABSTRACT:**

We report experiments studying the classic Burdett-Judd (1983) model of price dispersion, using some parameter sets that are theoretically lead to a stable Nash equilibrium distribution of dispersed prices and other parameter sets where the NE is theoretically unstable. We introduce new techniques for detecting cycles in dispersed prices and find evidence of cycles in some treatments.

**Author(s):** Timothy Cason, Daniel Friedman, Ed Hopkins  
**Topic:** Markets: Industrial Organization, Decision Theory: Learning

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**An Experiment on Partial Cross-Ownership in Oligopolistic Markets**

**Volker Benndorf**  
**Goethe-Universitaet Frankfurt**

**ABSTRACT:**

We examine coordinated and unilateral effects of horizontal partial cross-ownership (PCO) in a laboratory experiment. Firms have symmetric, non-controlling shares of each other in a static and a dynamic Bertrand setting. The data of the dynamic game confirm the theoretical prediction and show that firms are more collusive with PCO than without. Average prices are consequently higher. In the static game, firms do not coordinate on the monopoly price but behave less competitively by charging higher average prices with increasing PCO. While standard theoretical predictions are still 'no-collusion Nash prices', models assuming bounded rationality show that firms' incentive to compete are reduced with passive PCO and predict the observed higher average prices very well. We conclude that collusion can add to the unilateral anti-competitive effects of PCO but is not necessary to observe higher prices. Our paper therefore underlines the negative effect of PCO for consumers and its importance for competition policy.

**Author(s):** Volker Benndorf, Johannes Odenkirchen  
**Topic:** Markets: Industrial Organization, Applied Economics: Other
Recommendations in Credence Goods Markets with Horizontal Product Differentiation

Katharina Momsen
University of Innsbruck

ABSTRACT:
Consumers often have difficulties to identify and select their most preferred product version before purchase if several versions exist. In credence goods markets consumers also lack information to evaluate their purchase ex post. I investigate markets for horizontally differentiated credence goods experimentally. In my setting, valuations are unknown to consumers, but can be observed by sellers if they invest in consumer advice. Investment is costly and unobservable. Sellers can give advice to consumers and thus potentially influence their choices. Thereby, sellers may face a trade-off between their own profit maximization and consumer welfare. I analyze the impact of two policy measures 'the introduction of watchdogs and the revelation of the sellers' investment decisions ' on the market outcome. I find that in the absence of watchdogs and with concealed investment decisions, investment rates are low. Even sellers who have invested give selfish advice. However, the low price level ensures a relatively high consumer surplus. Revealing the investment decisions increases the share of investing sellers, yet it does not increase the quality of the recommendations. Only with both watchdogs and revealed investment decisions is the quality of advice increased and buyers accept higher prices such that welfare is highest.

Author(s): Katharina Momsen
Topic: Markets: Industrial Organization, Social Behavior: Lying and Cheating
Link: https://sites.google.com/site/katharinamomsen/research
Back to session: Markets 2

Behavior-based price discrimination and retention offers: An experimental analysis

Michel Tolksdorf
Technische Universitaet Berlin

ABSTRACT:
In a market pricing experiment I analyze behavior-based price discrimination (BBPD) with retention offers in a duopolistic Hotelling framework. Buyers were simulated and behaved optimally, while participants of the experiment took the role of the sellers. The baseline treatment is a two-period game with uniform pricing, while the advanced treatments feature a) BBPD without retention offers and b) BBPD with retention offers. In accordance with the theoretical predictions BBPD fosters fiercer competition in the second period, but comes at the cost of higher prices in the first period and causes welfare losses due to inefficient switching. Unlike the theoretical predictions, sellers in the experimental market are better off under BBPD, at the cost of consumer surplus. The detrimental effects on total welfare and consumer surplus, as well as the increased first period prices are fully negated when sellers can make retention offers.

Author(s): Michel Tolksdorf
Topic: Markets: Industrial Organization, N/A
Back to session: Markets 2

The effect of ownership structure in markets with externality

Mario Scharfbillig
Johannes Gutenberg University Mainz

ABSTRACT:
Recent research has shown that a sizeable fraction of people is willing to forgo their own profits in experimental market settings to prevent third parties from suffering an externality loss. However, other research shows that people are also willing to delegate immoral tasks away in order to reduce the feeling of responsibility. It is unclear how these two findings interact. I address this gap in the literature by investigating a multi-period perfectly competitive posted-offer market, in which the seller can delegate the product (and pricing) choice away. I compare a baseline market without delegation with two treatments, one where the producer is forced to let a manager make a decision for him (fixed pairing) and one, where he can choose among several managers, with more potential managers available than can be employed. Managers are incentivized by profit sharing. The outcomes of interest are whether delegation within the market context leads to i) a lower share of the socially optimal product to be traded (i.e. more products are traded which impose an externality on a third party) and ii) the burden sharing among producers and consumers of the costs of 'being nice'. In order to validate the potential influence of responsibility diffusion through delegation, I elicit norms on the participants responsibility assignment within each treatment using a standard norm elicitation game.

**Author(s):** Mario Scharfbillig  
**Topic:** Markets: Other, Social Behavior: Norms and Morals  
**Back to session:** Markets 3

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**Simulating Health Insurance Regimes' Adoption and Impacts across Lifetime in a Laboratory Experiment**

**Dustin Tracy**  
**GSU**

**ABSTRACT:**

We create a computer environment in which subjects make health investment decisions. Subjects’ health determines their in-simulation income and moderates the enjoyment they get from consumption. Health declines a fixed amount every period and with a known probability declines a larger amount. In addition to directly spending on health, subjects can also purchase fitness and insurance. Former decreases shock size and the latter funds recovery from them. In this environment, we test the performance of an actuarial fair plan against an employer sponsored plan. In preliminary results we find that in contrast to theoretical predictions the Actuarial system does not increase life enjoyment and has lower average health.

**Author(s):** Dustin Tracy, Stephen Rassenti, Lance Clifner  
**Topic:** Markets: Other, Applied Economics: Other  
**Back to session:** Markets 3

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**Strategic Demand Response to Dynamic Pricing: A Lab Experiment for the Electricity Market**

**Ayse Tugba Atasoy**  
**RWTH Aachen University**

**ABSTRACT:**

We develop a laboratory tool to investigate the demand response in the electricity market. The baseline treatment constitutes a two-period `wait-or-buy' game with an exogenous first period, an automated supplier, and twenty subject buyers. While the seller offers a fixed number of products in the market, consumers decide on purchasing it immediately or waiting until the next period, taking (i) price uncertainty and (ii) inventory risk into account. This treatment captures demand response in the retail market with scarce products. We design an additional treatment by removing the inventory constraint and allowing for a cost schedule that accounts for congestion, where consumers only bear the price risk -- mimicking the demand response in the electricity market. We find that in both retail and electricity treatments, while consumers on average play the equilibrium predictions and buy strategically, there are systematic deviations from
An Experimental Test of the Commodity Pricing Model with Storage

Katerina Sherstyuk
University of Hawaii, Dept of Economics

ABSTRACT:

We investigate a competitive double auction market in the presence of storage opportunities. Understanding the role of storage in behavior of markets is important, as theoretically, harvest uncertainty with added possibility of storage can explain the empirically observed price volatility in commodity markets. However, the empirically observed commodity prices exhibit excessive auto-correlation beyond the levels explained by theory, and the inventories are often above those predicted under stationary distribution of supply shock. We use a controlled laboratory experiment to discriminate between two possible reasons of the empirically observed phenomena: (1) agents' behavioral imperfections, or (2) non-stationarity of supply shock. Further, we vary the information environments across treatments to gain a clearer understanding of how policies, such as government reporting of production and inventories, help to abate commodity bubble formation. Third, we study whether and how the markets with stochastic supply adjust to the changes in the distribution of supply shock. While studies on experimental commodity markets without storage indicate that markets efficiently aggregate dispersed information and quickly adjust to new equilibria, it is less clear whether the markets will quickly converge to theoretical stochastic dynamic equilibria, and whether they will adequately adjust when the distribution of exogenous shocks shifts in an ambiguous way. The results could provide some insight into whether the possibility of storage might smooth transition to new environments, such as the way climate change will affect food commodities, or whether such change may induce greater volatility and incidence of pricing bubbles.

Copy Trading

Joerg Oechssler
University of Heidelberg

ABSTRACT:

Copy trading allows traders in social networks to receive information about the success of other agents in financial markets and to directly copy their positions. The present paper studies the implications of copy trading for risk taking of financial agents from an experimental point of view. We show that providing information on the success of others leads to a significant increase in risk taking of subjects and that this increase in risk taking is even larger when subjects are provided with the option to directly copy others. Copy trading reduces ex-ante welfare, and leads to excessive risk taking.

Copy Trading

Jose Apesteguia, Joerg Oechssler, and Simon Weidenholzer

ABSTRACT:

Copy trading allows traders in social networks to receive information about the success of other agents in financial markets and to directly copy their positions. The present paper studies the implications of copy trading for risk taking of financial agents from an experimental point of view. We show that providing information on the success of others leads to a significant increase in risk taking of subjects and that this increase in risk taking is even larger when subjects are provided with the option to directly copy others. Copy trading reduces ex-ante welfare, and leads to excessive risk taking.
Aggregation and Convergence in Experimental General Equilibrium Economies Constructed from Naturally Occurring Preferences

Ryan Oprea
University of British Columbia

ABSTRACT:
Prior laboratory experiments have studied general equilibrium economies constructed from "induced preferences" for artificial goods. New methods allow us to study economies constructed instead from subjects' actual, "homegrown" preferences. Our subjects reveal their preferences by choosing portfolios of Arrow securities from budget lines through fixed endowments for a series of prices. We then construct several different economies by sorting subjects according to their revealed preferences. The constructed economies exhibit a wide range of predicted outcomes, where predictions are competitive general equilibria given the revealed preferences. Perhaps surprisingly, in every one of our markets the predicted excess demand is well-behaved, and avoids the pathologies highlighted in the Sonnenschein-Mantel-Debreu theorem. (The main reason seems to be heterogeneity in revealed preferences.) Actual trade in the constructed economies using a tatonnement market institution closely tracks predictions in most markets. The exceptions are economies that, due to wealth effects, have excess demands that are flat relative to measured preference volatility.

Author(s): Sean Crockett, Daniel Friedman and Ryan Oprea
Topic: Markets: Finance, Decision Theory: Preferences
Back to session: Markets 4

How are Altruistic Preferences Aggregated in Competitive Markets? A Laboratory Experiment

Markus Vomhof
University of Dusseldorf

ABSTRACT:
Using a laboratory experiment, we study quality competition among hospitals in a Salop model where quality choices are determined by three subjects through a simple majority decision rule. We focus on deviations from profit maximizing strategies that we attribute to altruism since higher quality levels increase patient utility. Three hospitals establish a market and compete for patients by their quality choices in the first part of the experiment. In the second part, an exogenous merger of two of three hospitals happens. We investigate how individual preferences for altruism carry over to hospital behavior and market performance and how a merger effects this aggregation. In part 1, we find substantial heterogeneity in individual preferences for altruism which is reflected in hospital behavior and market performance. The distribution of individual altruism types becomes more altruistic in part 2 but the altruistic shift can be eroded by cost synergies.

Author(s): Johann Han, Nadja Kairies-Schwarz, Markus Vomhof
Topic: Markets: Industrial Organization, Social Behavior: Group Behavior
Back to session: Markets 4

All-pay auctions without a level playing field

Lucas Rentschler
Utah State University

ABSTRACT:
We experimentally investigate the effect of making the playing field more uneven in all-pay auctions with complete
information. In particular, in three-player environments we hold the second highest value constant and examine the effect of increasing the highest value, as well as the effect of decreasing the lowest value. In addition, we study two-player environments and measure the effect of increasing the advantage held by the player with the higher value.

Author(s): Daniel Kovenock and Lucas Rentschler

Fairness in Markets and Market Experiments

Dirk Engelmann
Humboldt University Berlin

ABSTRACT:

Whether pro-social preferences identified in economic laboratories survive in natural market contexts is an important and contested issue. We investigate how fairness in a laboratory experiment framed explicitly as a market exchange relates to preferences for fair trade products before and in the experiment. We find that the willingness to buy at a higher price when higher wages are paid to the worker correlates both with the choice for a fair trade product before the laboratory experiment and with whether participants are willing to pay a positive fair trade premium, elicited at the end of the experiment. These results support the notion that fairness preferences as assessed in laboratory experiments capture preferences for fair behavior in comparable situations outside the laboratory.

Author(s): Dirk Engelmann, Jana Friedrichsen, Dorothea Kubler

Follow the Money: Bayesian Markets to Extract Crowd Wisdom

Tong V. Wang
Erasmus University Rotterdam

ABSTRACT:

Originally designed as an incentive mechanism to elicit private information (subjective judgments or unverifiable facts), Bayesian markets (Baillon 2017) also offer a solution to the single-question crowd wisdom problem. Here we propose an algorithm for extracting wisdom from the crowd: select the answer submitted by agents with a positive average ex post payoff in the Bayesian market. We show theoretically that this 'follow the money' principle yields the correct answer under reasonable assumptions. A lab experiment with an artificial task demonstrates how to use this mechanism in practice. Another lab experiment involving natural tasks compares the performance of this mechanism with the 'surprisingly popular' algorithm (Prelec et al. 2017).

Author(s): Aurelien Baillon, Tong V. Wang

Two weddings and a funeral - The effect of incentives on noisy survey data

Georg Granic
Erasmus University Rotterdam
ABSTRACT:

We investigate the impact of Bayesian Truth Serum (Prelec, 2004) incentives in three classical domains of hypothetical choice in a large-scale, online experiment. The Bayesian Truth Serum is a direct-incentive-compatible-mechanism that incentivizes truth-telling in questions of unverifiable truth. We exogenously manipulate data quality introducing a quantifiable bias in responses. We find that if biases affect the data generating process, Bayesian Truth Serum incentives induce more effort and deliberation in participants, which in turn reduce the impact of biases on responses. We also find idiosyncratic differences in the effectiveness of incentives across question domains. Incentives had the strongest impact on behavior in domains that prompted affective responses.

Author(s): Aurelien Baillon, Han Bleichrodt, Georg Granic


Back to session: Methodology (SHORT)

Cooperation stability

Toke Fosgaard
University of Copenhagen

ABSTRACT:

The decline of repeated cooperation is one of the most robust findings in behavioral economics, replicated in an endless number of experiments. Yet it is not well-understood how predictive this behavioral regularity is for the population at large. I am making two steps to explore the external validity of cooperation stability. First, I measure repeated cooperation among students and a representative sample. Among students, I indeed confirm the usual decay effect of cooperation but among non-students the behavior is hugely different and approaching no decay. Secondly, I challenge the cooperation stability among non-students by manipulating the group composition of preferences such that respectively fast decay and no decay is predicted. I observe that the cooperation is remarkably unaffected by this manipulation.

Author(s): Toke R Fosgaard (University of Copenhagen)


Back to session: Methodology (SHORT)

Pairwise Normalization

Ryan Webb
University of Toronto

ABSTRACT:

We propose a theory of multi-attribute choice founded in the neuroscience of sensory perception. The theory explains a range of well-documented 'context-dependent' choice phenomena using divisive normalization, a form of neural coding widely observed across many sensory modalities and species. We propose that the attributes of choice alternatives are normalized in a pairwise manner, drawing on experimental evidence of attribute-level comparisons between pairs of alternatives. Our resulting 'pairwise normalization" model uniquely captures a broad range of observed context-dependent behaviours, including the dominance, compromise, and similarity effects, majority-rules intransitivities, and attribute comparability biases, while also providing a neurobiological basis for some classic microeconomic preference representations.

Author(s): Ryan Webb, Peter Landry

Topic: Psychology and Biology: Neuroeconomics, Decision Theory: Preferences

Back to session: Methodology (SHORT)
Domain Expertise or Algorithmic Insight? Fast Optimization of Information Gain in Experimental Design

Stefano Bālietti
Northeastern University

ABSTRACT:

We illustrate and extend a dynamic method for designing and executing Bayesian optimal experiments, the output of which comes in the form of recommended experimental design parameters to use in a behavioral experiment. We then compare this optimal experiment to the most frequently suggested experimental designs of 60 expert economists recruited in an online survey. Our algorithmic approach extends seminal methods on Bayesian optimal design that appear to have not yet taken hold due to computational limitations. The goal of this approach is to find the point in the space of possible experimental designs that would maximize the information gained from running an experiment with that design. This process is computationally expensive, and as such, we propose and evaluate two improvements. First, we borrow a new search algorithm designed to adaptively learn the contours of a multi-dimensional landscape, which here represents the possible experiments to run (and their associated information gain). Second, we develop a probabilistic bootstrapping procedure to reduce the number of experimental outcomes that need to be considered in order to calculate the information gain. Together, these two improvements reduce computational complexity by several orders of magnitude over the naive approach while simultaneously increasing precision and minimizing regret. Finally, this algorithmic approach outperformed expert economists who were asked about their recommendations for the optimal experiment to run. By actually running the experiments that were output by our optimal design algorithm and those recommended by experts, we were able to assess the benefits of computationally augmenting the expertise of researchers, pairing scientific intuition with (Bayesian optimal) algorithmic insight.

Author(s): S. Bālietti, B. Klein, C. Riedl

Topic: Methodology: Experimental Design, Tools and Practices, Methodology: Other

Collective conditionality in decontextualized lab and framed field experiments: on the incentive mechanisms of agri-environmental contracts

Kristin Limbach
ENGEES

ABSTRACT:

Individual subsidy payments that are conditional on a collective threshold is reached could provide a viable resolution to the limited and scattered adoption of agri-environmental contracts aiming at attaining environmental quality targets. Hesitations to apply collectively conditional incentives result in a lack of data, especially from the field, concerning their effectiveness. Based on a threshold public good game (TPGG, Croson & Marks, 2000), two treatments are studied. First, an unconditional subsidy is provided for every unit of the initial endowment contributed to the public good (treatment US). Second, a conditional subsidy is provided proportional to individual contributions only if the group threshold is reached (treatment CS). Two experiments are conducted: one examines the standard decontextualized TPGG in a strictly controlled laboratory environment, and one studies a contextualized TPGG by means of a framed field experiment (Harrison & List, 2004) directly applied to the target population that is naturally immersed in the evoked context. In the lab setting, both subsidy schemes elicit higher average cooperation rates than does the control. In the framed field setting, average contribution rates are sustained well above the threshold and, across all periods, are strictly exceeding those observed in the decontextualized lab experiment. Similar to the findings of Stoop, Noussair & van Soest (2011) farmers seem to cooperate even better than do students, apparently independent of the subsidy scheme applied.

Author(s): Philippe Le Coent, Kristin Limbach, Raphaele Preget, Anne Rozan, Sophie Thoyer
Do Not Rely On Chance in Randomization: Use Balanced Randomization in the Laboratory Experiments.

Igor Asanov
University of Kassel

ABSTRACT:

The replication crises in science uncovered that a large number of studies rely on underpowered laboratory experiments where sample variability produces noisy results. While increasing sample size is an attractive solution, it is not necessarily effective, efficient and fair. It can produce budget competition and favor researchers that have access to financial means still, producing a large level of false positive. The effective, cheap and fair alternative is to decrease noise in the laboratory experiments by using balanced randomization method (that is widely used in the field studies). This method both drastically increase the power of the study -- the chance to find genuine effect -- and do not increase the chance of false positive results. In this study, I report the results of the simulation to show the efficiency of the balanced randomization for economic laboratory experiments.

Author(s): Igor Asanov

Coordination and Learning in Games with Strategic Substitutes and Complements

Anne-Christine Barthel
West Texas A&M University

ABSTRACT:

This paper experimentally compares the impact of the presence of strategic substitutes (GSS) and complements (GSC) on players' ability to successfully play equilibrium strategies. By exploiting a simple property of the ordering on strategy spaces, our design allows us to isolate these effects by avoiding other confounding factors that are present in more complex settings, such as market games. We find that the presence of strategic complementarities significantly improves the rate of Nash play, but that this effect is driven mainly by early rounds of play. This suggests that GSS may be more difficult to learn initially, but that given sufficient time, the theoretically supported globally stable equilibrium offers a good prediction in both settings. We also show that increasing the degree of substitutability or complementarity does not significantly improve performance in either setting, which builds on the findings of previous studies.

Author(s): Anne-Christine Barthel, Eric Hoffmann and Andrew Monaco

Measuring skill and chance in games

Marco Lambrecht
AWI Heidelberg

ABSTRACT:
Online and offline gaming has become a multi-billion dollar industry. However, games of chance are prohibited or tightly regulated in many jurisdictions. Thus, the question whether a game predominantly depends on skill or chance has important legal and regulatory implications. In this paper, we suggest a new empirical criterion for distinguishing games of skill from games of chance: All players are ranked according to a 'best-fit' Elo algorithm. The wider the distribution of player ratings are in a game, the more important is the role of skill. Most importantly, we provide a new benchmark ('50%-chess') that allows to decide whether games predominantly depend on chance, as this criterion is often used by courts. We apply the method to large datasets of various two-player games (e.g. chess, poker, backgammon). Our findings indicate that most popular online games, including poker, are below the threshold of 50% skill and thus depend predominantly on chance. In fact, poker contains about as much skill as chess when 3 out of 4 chess games are replaced by a coin flip. Keywords: Elo, ranking, games of skill, games of chance, chess, poker

Author(s): Peter Duersch Marco Lambrecht Joerg Oechssler
Topic: Games: Other, Methodology: Other

Common knowledge in coordination games: learning from non-replication

Roy Chen
National University of Singapore

ABSTRACT:

Chen and Chen (2011) found that ingroup identity increases the likelihood of efficient coordination in the minimum effort game. In the replication study of Camerer et al. (2016), this result did not replicate. In this study, we explore what may have led to this non-replication. We identify a protocol deviation in the replication study that may have led to a loss of common knowledge among subjects. We conduct a new laboratory experiment with a 2x2 design, varying both ingroup versus outgroup matching as in the original study, as well as common knowledge versus no common knowledge of the game rules among subjects. We also perform a meta-analysis of all the data collected in these experiments. We find that common knowledge is essential for social identity to affect behavior in the minimum effort game. Our study also contributes to the collective knowledge regarding the essential factors in replication studies.

Author(s): Roy Chen, Yan Chen, Yohanes E. Riyanto
Topic: Games: Coordination, Methodology: Experimental Design, Tools and Practices

Implementing Ordinal Games in the Lab

Ahrash Dianat
University of Essex

ABSTRACT:

Game-theoretic predictions are based on players' utilities over outcomes. Although the outcome of a laboratory experiment is the combination of payoffs each subject receives, it is common practice in experimental economics to focus only on each subject's own monetary payoff when trying to 'induce' particular games in the lab. If preferences over one's own monetary payoff are not perfectly aligned with preferences over outcomes, treating monetary payoffs as utilities can lead to incorrect inference about players' rationality and the empirical content of Nash equilibrium. We introduce a novel class of two-player games where players' preferences over the outcomes of the game do not depend on their underlying social preferences. Using this class of games, we conduct a laboratory experiment that allows us to cleanly test game-theoretic predictions.

Author(s): Ahrash Dianat and Greg Leo
Topic: Games: Other, Methodology: Experimental Design, Tools and Practices
Is there really a difference between 'contingent valuation' and 'choice experiments'?

Ewa Zawojska
University of Warsaw

ABSTRACT:

'Contingent valuation' ('CV') and 'choice experiments' ('CE') are generally introduced as two separate stated preference approaches, and a large literature investigates their convergent validity. We first review the literature comparing 'CV' and 'CE', and show that applications of the two approaches typically differ in (1) the number of options presented per value elicitation task, (2) the number of tasks given to a single respondent, (3) the framing of the tasks, (4) the set (and order) of attributes characterizing options in tasks, (5) sizes of 'CV' and 'CE' samples, (6) econometric models used for data analysis, and (7) the format of information presented. Despite the wide variety of applications, we argue that the main (and perhaps only) difference between 'CV' and 'CE' is the presentation of information in value elicitation tasks: the information is typically displayed as text in 'CV' and as a table in 'CE'. We then assess the effect of presentation of information in an induced-value laboratory experiment. We find that participants perform equally well in 'CV' and 'CE' tasks in terms of making payoff-maximizing choices based on the induced values, but 'CV' tasks take substantially more time to answer. A significant difference between payoff-maximizing choices in 'CV' and 'CE' is observed when only answers to the first elicitation task are considered. This latter finding is particularly important in light of recommendations for stated preference research that suggest that non-market valuation studies should use only one task for eliciting preferences.

Author(s): Wiktor Adamowicz, Patrick Lloyd-Smith, Ewa Zawojska
Topic: Methodology: Experimental Design, Tools and Practices, N/A

On the Validity of (Cost-Saving) Randomization Methods in Dictator-Game Experiments: A Systematic Test

Gari Walkowitz
Technical University of Munich

ABSTRACT:

Motivated by methodological concerns, theoretical considerations, and evidence from previous studies, this paper makes a contribution to conducting dictator-game experiments under resource constraints. Using a holistic and strictly controlled approach, we systematically assess the validity of common cost-saving dictator-game variants. We include five common approaches and compare them to a standard dictator game: involving fewer receivers than dictators; paying only some subjects or decisions; role uncertainty at the time of the transfer decision; a combination of random decision payment and role uncertainty. To test the validity of subjects' dictator-game decisions, we relate them to complementary individual difference measures of generosity: social value orientation, personal values, and a donation to charity. In line with previous evidence, our data show that dictator behavior is quite sensitive to the applied methods. The standard version of the dictator game has the highest validity. Involving fewer receivers than dictators and not paying for all decisions yields comparably valid results. These methods may, therefore, represent feasible alternatives for the conduct of dictator games under contraints. By contrast, in the dictator-game variants where only some subjects are paid or where subjects face uncertainty about their final player role, the expected associations with other measures of generosity are distorted. Under role uncertainty, generosity is also biased upwards. We conclude that these methods are inappropriate when the researchers are interested in valid individual measures of generosity.

Author(s): Gari Walkowitz
How to make your data findable, long time accessible and citable on your terms?

Dirk Betz
GESIS - Leibniz Institute for the Social Sciences

ABSTRACT:
The four FAIR Data Principles (findable, accessible, interoperable and reusable) have received worldwide recognition. These principles provide basic guidance for data producers. Meanwhile, many funding organizations require to include a Data Management Plan as an integral part of any grant proposal (Horizon 2020, MRC) and some scientific journals demand access to data as part of good scientific practice. Translating the FAIR principles into practice, it includes infrastructures for long-term archiving with community-oriented metadata to describe the data, assigning a persistent identifier (like a DOI) and making sure the data is findable through disciplinary (and transdisciplinary) discovery portals. In Germany two big publicly funded infrastructure organizations (GESIS-Leibniz Institute for Social Sciences and ZBW Leibniz Information Center for Economics) are offering a DOI-Registrations service for social and economic research data called da|ra (https://www.da-ra.de/en). In cooperation with DataCite and on the basis of the DOI system this infrastructure lays the foundation for long-term, persistent identification, localization and reliable citation of research data. Meanwhile, more than 90 clients are using the service, among them the Research Data and Service Centre of the Deutsche Bundesbank (FDSZ) and x-econ (https://www.x-econ.org), the community-oriented data repository for experimental economics created by GESIS, the University of Vienna and the University of Magdeburg. The benefits of the use of x-econ and da|ra and their core elements are presented by use cases. Finally, the need for further developments and the interaction with open science organizations such as Open Science Framework (OSF) to help researchers save time and effort shall be discussed.

Author(s): Dirk Betz, Brigitte Hausstein, Claudia Biniosshek

Income uncertainty and retirement savings in different pension systems: An experimental study

Martin Angerer
University of Liechtenstein

ABSTRACT:
We investigate consumption and saving decisions in an experimental framework. Our treatment conditions are designed to test the effects of different pension systems on consumption choices, as well as potential differences between decision makers with or without income uncertainty. An interesting research question that still remains unanswered in the literature is how these various pension systems influence saving decisions. It is known that in Europe the main structure of the pension system is a three-pillar system, which includes a mandatory public pension, an occupational pension, and private pension plans. The main idea of this research is to compare the saving behavior of people within three different systems that are constructed to reassemble the three pillar system. We analyze which of them motivates people to make larger precautionary saving. Additionally we analyze how stochasticity in future income streams affects savings decisions in comparison with the case when income is deterministic. Our preliminary analyses show that subjects across treatments tend to link their consumption to current available income. While the optimal path given our functions would be to gradually increase consumption over time, subjects tend to increase consumption while they receive income and
reduce consumption once the income stream stops. Participants in a system with obligatory as well as voluntary pension contributions outperform their counterparts in the other two treatments, where either one or both devices are absent. In a further analysis we will test the impact of subject characteristics on consumption decisions. We expect that participants' risk attitudes have an impact on consumption and saving behavior, with risk averse people prefer to delay consumption. This effect is expected to be larger in treatments with income uncertainty. Moreover, we expect risk aversion to impact subjects' interaction with the devices of the pension system. Short Summary: In the current paper we analyze the effect of different pension systems on saving decisions. We find that in a system with obligatory as well as voluntary pension contributions participants outperform their counterparts of the other two treatments, where either one or both devices are absent. Additionally, we find that an increase in income has a positive influence on savings. The effect of risk aversion is still left to be investigated.

Author(s): Angerer Martin; Hanke Michael, Shakina Ekaterina, Szymczak Wiebke

Dynamic Consistency, Sample Selection and Attrition: A Panel Experiment on Individual Discount Rates

Hong Il Yoo
Durham University

ABSTRACT:
Temporal stability in time preferences is a fundamental hypothesis that underlies the predictions of many economic models. We evaluate this hypothesis using data from a longitudinal field experiment in Denmark, with a representative sample of the adult population. Our experimental design allows us to identify a range of exponential and non-exponential discounting models, whilst controlling for the non-linear curvature of the utility function and the effects of sample selection and attrition. Detecting dynamic consistency or inconsistency in economic decisions requires the use of panel data, making the issue of endogenous selection and attrition inherently pertinent to the present analysis. We propose a structural econometric model that fully harnesses flexibility that our experimental design offers, in a framework that accounts for endogenous sampling and unobserved heterogeneity in preferences. The model captures within-individual correlation in preferences over study periods, and between risk and time domains. Our econometric strategy allows us to distinguish temporal stability in the population distribution of time preferences from within-individual correlation in time preferences. It also allows us to address a broad range of questions in a coherent manner, including whether risk averse individuals tend to me more patient; whether non-expected utility decision makers tend to be non-exponential discounters; and whether more patient individuals are more likely to participate in a field experiment.

Author(s): Glenn W. Harrison; Morten I. Lau and Hong Il Yoo
Topic: Methodology: Lab, Field and External Validity, Decision Theory: Preferences

The Endowment Effect and Savings Decisions of the Poor

Lisa Spantig
LMU Munich

ABSTRACT:
The endowment effect is one of the cornerstones of behavioral economics, found in a variety of settings. It can have important consequences for the design of contracts and institutions. One important but so far neglected area in which the endowment effect may play a role are savings decisions of the poor. In many developing countries, poor households
receive their income in cash. This cash 'endowment' may increase the psychological costs of formal savings, contributing to the widely observed puzzling low savings rates of the poor. I experimentally study the causal effect of cash endowments on savings deposits of 300 Filipino microfinance clients, using a simple, high-stakes natural decision with external validity and controlling for potential confounds such as transaction costs and time preferences. Cash endowments make individuals feel richer, yet this feeling of endowment does not translate into lower savings. Cash in this setting appears to be fully fungible.

Author(s): Lisa Spantig

Topic: Methodology: Lab, Field and External Validity, Applied Economics: Economic Development

Back to session: Methodology 3: External Validity

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**Does Incentivizing Belief Accuracy Matter in Large-Scale Surveys? Experimental Evidence**

Elisabeth Grewenig
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**ABSTRACT:**

A growing literature in economics has emphasized the importance of people's beliefs on, or perceptions of, economic facts. For instance, in the political economy literature, the electorates' beliefs about perceived inequality seem to be decisive for understanding preferences towards redistribution policies (e.g. Alesina and La Ferrara, 2005; Kuziemko et al., 2015; Alesina et al., 2017). The macroeconomic literature frequently uses inflation perceptions for examining the features of household consumption and investment decisions or the impact of monetary policies (e.g. Armantier et al. 2016; Cavallo et al. 2017). Relatedly, people's perceptions have been used as proxies for variables which are otherwise difficult to measure, such as the prevalence of corruption (e.g., Olken, 2009). These and many other studies usually use large-scale surveys to study the distribution of beliefs in the population. However, simply asking respondents' (sometimes fairly complex) questions about their beliefs bears some fundamental potential problems. For instance, respondents may put too little cognitive effort in answering such questions accurately, or they may give socially desirable or self-serving answers. To encourage truthful reporting, laboratory experiments frequently incentivize belief accuracy. But while the laboratory evidence on the effects of belief incentivization on belief accuracy is well developed (see for instance Trautmann and de Kuilen, 2014 or Schlag et al., 2015), nothing is known whether providing monetary incentives can increase belief accuracy in large-scale surveys. In this paper, we close this research gap by testing the effectiveness of incentivizing the accuracy of beliefs on economic facts in a large-scale survey. In particular, we implemented experiments in an online survey (N>3,600) which elicited beliefs about two central economic facts: average public school spending, and average earnings by professional degree. For both belief questions, we offered randomly selected treatment groups a monetary reward for accurate answers. The control groups answered the same questions without any incentives. If lack of effort or self-serving answering behavior indeed biases unincentivized answers, stated beliefs should be more accurate with incentives. We start our analysis by investigating beliefs on average school spending per student and year. In the control group, school spending beliefs are strongly dispersed with a 10-90 percentile range of 20 Euros to 21,000 Euros (correct answer: 7,400 Euros). Moreover, the mass of respondents seems to underestimate current school spending levels with 80 percent believing that the current level of school spending lies below its actual value. Providing incentives affects respondents' stated beliefs. We find significant positive incentive effects on (i) average school spending beliefs, (ii) accuracy of the school spending belief (measured by the distance to the true value), and (iii) respondents' confidence that the stated belief is correct. At the same time, the incentive significantly decreases the probability of reporting a very low value of below 100 Euros. To examine whether the incentive effects persist beyond the immediate horizon, we re-elicited respondents' belief (without any incentive treatments) in a re-survey about two weeks after the main survey. The significant incentive effects found in the main survey persist in the re-survey. The advantage that large-scale online surveys to cover a more diverse and more representative subject pool than the usual pool of laboratory subjects comes at the cost of less control over the subjects. For the case of incentivizing beliefs, one cannot observe whether improvements of belief accuracy in response to incentive provision are due to a genuine increase in cognitive effort, or because respondents use any external tools to improve beliefs. Given that average school spending information is easily accessible through online search engines, one obvious concern is that increased belief accuracy is simply driven by online search behavior of incentivized respondents. Excluding respondents who stated the values which are returned by online search engines as their beliefs leaves our general results unchanged,
although we ultimately cannot quantify the extent to which the accuracy-enhancing effect of incentivization is due to online search behavior. Next, we investigate beliefs about earnings by professional degree. In the corresponding question, we asked respondents to simultaneously state their beliefs about average earnings of persons without any professional degree and earnings of those with university degree. Overall, the 10-90 percentile range of beliefs about average earnings without a degree is 450 Euros to 1,600 Euros (correct answer: 1,400 Euros), and the corresponding interval for beliefs about earnings with university degree is 1,000 Euros to 4,800 Euros (correct answer: 2,750 euros). Moreover, respondents seem to underestimate current earnings levels. 82 percent (58 percent) of beliefs about average earnings of persons without a degree (with a university degree) lie below its actual value. We find little incentive effects on earnings beliefs. While incentive treatment increases the average amount of earnings beliefs without a degree and with a university degree (p<0.1 and p<0.05, respectively), we do not find any significant effects on accuracy, confidence, or the probability to state a very low value of below 100 Euros. Thus, in contrast to school spending beliefs, incentives do not improve the accuracy of beliefs about earnings by professional degree. This differential effect of incentives might be due to two reasons: First, average public school spending per student is arguably more abstract a concept, and therefore less accessible, than earnings by professional degree. Consequently, the school spending experiment leaves more room for the incentives to increase accuracy through effort. Second, the differences could stem from the fact that average school spending levels are easier to find online than earning figures by professional degree (which we derived from own calculations using the German Microcensus). Thus, while the use of online search engines unlikely drives the entire incentive effect on spending belief accuracy, we cannot exclude the possibility that differential effects are due to respondents' online search behavior. Next, we investigate the prevalence of incentive treatment effects in different sociodemographic subgroups. We find some effect heterogeneities with respect to the respondents' age, parental status and school track. Noteworthy, we do not detect any effect heterogeneities with respect to respondents' risk preference or patience, which alleviates potential concerns that incentive schemes affect respondents' with different non-cognitive traits differently. In further analyses, we investigate the effects of incentivizing belief accuracy on related policy preferences (preferences for school spending increases, and preferences for introducing tuition fees). Incentive provision for accurate beliefs does not have any effects on related policy preferences. As providing incentives to participants of large-scale surveys might often be infeasible due to financial constraints or lack of technical viability, we finally provide results from an alternative experiment in which we aimed at improving belief accuracy through an alternative strategy: encouragement. The corresponding encouragement experiment, which was administered to a different sample of more than 4,000 respondents, a randomly selected treatment group was motivated to provide a good answer to the school spending question by emphasizing to the importance of giving a correct answer. Our results do not suggest the presence of any encouragement effects, neither on stated school spending beliefs (absolute values, accuracy, confidence or probability to provide a value below 100) nor on related policy preferences. Thus, encouragement turns out not to be a viable substitute for providing monetary incentives.

Author(s): Elisabeth Grewenig, Philipp Lergetporer, Katharina Werner, and Ludger Woessmann

Topic: Methodology: Lab, Field and External Validity, Decision Theory: Beliefs

Back to session: Methodology 3: External Validity

Is consistency procedure invariant?

Dotan Persitz
Tel Aviv University

ABSTRACT:

Procedure Invariance requires that recovered preferences (or heuristics) should be independent of the method used to elicit them. In this project we test this requirement on laboratory experiments that are designed to provide relatively large data sets on individual choice from linear budget sets. Two very different methodologies are used to execute these laboratory experiments. In the Textual Methodology subjects are asked to plug their choice into a sentence that describes their feasible alternatives. The Graphical Methodology requires subjects to choose their preferred bundle from a visually presented budget line. Our experiment is designed to compare these methodologies in the context of other-regarding preferences. We find that subjects are significantly less consistent in the Textual Methodology compared to the Graphical Methodology, especially when the budget lines they encounter are steep. Moreover, more subjects exhibit selfishness and fewer subjects exhibit egalitarian preferences when the Graphical Methodology is used. We repeat the experiment in...
the context of risk preferences to test whether these phenomena are independent of the examined preferences.

**Author(s):** Vered Kurtz, Dino Levy and Dotan Persitz  
**Topic:** Methodology: Lab, Field and External Validity, Decision Theory: Preferences

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**Stories We Tell: Self-serving beliefs and the effect of narratives on moral decision making**

Eugenio Verrina  
MPI Collective Goods & Cologne Graduate School

**ABSTRACT:**

Narratives are stories we create to make sense of our judgments and actions. They play a key role in moral decisions, where people use them to reconcile themselves with their self-image and to enhance their social-image. In this sense, they are a powerful tool to reduce the cognitive dissonance we experience when making morally relevant choices. This psychological need to search for reasons supporting one's convictions and its effect on behavior has been widely neglected in both theoretical and experimental economic literature. Our experiment provides a test of the economic relevance of narratives by investigating the role they play in conveying self-serving biased beliefs to an independent audience in a Dictator Game. Self-serving beliefs of Dictators arise in a real effort task in which Dictators and Recipients earn their endowment jointly. Dictators face ambiguity about the deservingness of Recipient and bias their beliefs to make it easier for them to give less in the Dictator Game. We check through three treatments, if Dictators exploit the possibility to send a message to an independent Observer to convey their self-serving beliefs about their Recipients. In a baseline treatment with no Observers, choices of Dictators remain private. In a public treatment, independent Observers are informed about the allocation decisions of Dictators. Finally, in a narrative treatment, we allow Dictators to send a message justifying their choice to Observers. According to our hypotheses, giving should go up between the baseline and the public treatment and go down again when Dictators can wash up their reputation through narratives.

**Author(s):** Serhiy Kandul, Frederik Schwerter, Eugenio Verrina  
**Topic:** Social Behavior: Norms and Morals, Decision Theory: Beliefs

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**The differential effect of narratives**

Adrian Hillenbrand  
University of Bonn

**ABSTRACT:**

Decision makers make use of narratives to justify anti-social (or pro-social) behavior and to convince others as well as themselves that they are doing the right thing. Narratives can spread through direct conversations, social, or news media. In this paper, we provide causal evidence on the effect of viewing someone else's narrative on behavior. We present narratives to subjects that other people have used to justify their giving in a dictator game, before subjects play a dictator game themselves. Further, we analyse whether there is a differential effect of narratives on pro-social or selfish decision makers. Finally, we provide new insights in the underlying mechanisms of how narratives work by investigating their influence on social norms and self-image.

**Author(s):** Adrian Hillenbrand, Eugenio Verrina  
**Topic:** Social Behavior: Norms and Morals, Social Behavior: Other
Adam & Eve's Legacy: Using Fig Leaves As Hypocritical Covers- An Experimental Investigation Into Economic Consequences

Bernd Irlenbusch
University of Cologne

ABSTRACT:
We provide a series of simple dictator game experiments to investigate economic consequences of hypocritical behavior. We show that a significant proportion of dictators try to hide an unfair allocation choices by covering it with a fig leaf. This is particularly true when the cover is communicated to the recipient. We investigate the consequences of the use of fig leaves on outcome fairness and efficiency. We also analyze possible measures to reduce hypocritical behavior.

Author(s): Jan-Erik Loennqvist, & Gari Walkowitz
Topic: Social Behavior: Norms and Morals, N/A
Back to session: Narratives and Hypocrisy

Social competition in networks: an experimental study

Mofei Jia
Xi'an Jiaotong Liverpool University

ABSTRACT:
A laboratory experiment has been designed to study the dynamics of social competition under different social network structures. In the experiment, we employ a so-called social competition game, i.e., each individual maximizes her utility by allocating her endowment between two goods, a private one and a competitive one. A competitive good means that an individual can get higher payoffs if she consumes 'more than the average of her neighbors in a network', for instance, a status good or national-defense good. By spending more on the competitive good, however, everybody decreases their utility/payoffs. In the experiment, subjects simultaneously make consumption decisions and receive feedbacks about the payoffs and the consumption decisions of subjects with whom they are directly connected in the network. We study this game in four networks that differ in connectedness and centrality. We find that in most cases the results converge to the Nash predictions about the competitive good consumption levels and payoffs. Namely, the consumption choices of individuals are determined by their network position: a specific measure of centrality, called the Katz-Bonacich centrality. The only exception happens in the network with only one central individual who tries to lower the intensity of competition and hence consumes less of the competitive good than the Nash equilibrium consumption level. We also study the impact of overall network structure, and find that in a more connected network, individuals spend more on the competitive good. Further, we find evidence that the convergence to Nash equilibrium can be described by myopic best-response dynamics.

Author(s): Armenak Antinyan, Gergely Horvath and Mofei Jia
Topic: Games: Networks, N/A
Back to session: Networks

Networks, Spillovers and Compliance

Natalia Borzino
ETH Zurich

ABSTRACT:
We study in a laboratory experiment how tax compliance information travels through a fixed-six-nodes circle network
structure. This game introduces four information conditions: No Info, Full Info, Positive Info and Negative Info. In the No Info treatment, subjects get individual information about whether they were audited, the outcome of it and her final payoff at the end of each round. In the Positive Info (Negative Info) treatment, participants get information as in the No Info, but also whether adjacent connected nodes were audited and found compliant (noncompliant). In the Full Info instead, participants get both positive and negative signals. We specifically control for the effect of signals on participants' beliefs on the ex-ante fixed and unknown audit probability by asking them using an incentive compatible mechanism. We keep the tax rate and fine rate fixed and known by the subjects. We found that receiving positive and negative signals have a significant effect in the levels of reporting and compliance at individual level. However, results are mixed at the aggregate level. Our findings suggest that diffusion of one negative signal (a bad example) is enough to generate a negative effect on individuals' tax compliance; while strong positive signals (two good examples) are required to increase the level of compliance within networks.

Author(s): Anna Rita Bennato, Natalia Borzino and Enrique Fatas  
Topic: Games: Networks, Social Behavior: Lying and Cheating

Partnership Formation in Social Network: An Experimental Investigation

Min Zhu  
Beijing Normal University

ABSTRACT:

This paper analyzes the formation of partnerships in social networks. Agents randomly request favors and turn to their neighbors to form a partnership. If favors are costly, agents have an incentive to delay the formation of the partnership. In that case, for any initial social network, the unique Markov Perfect equilibrium results in the formation of the maximum number of partnerships when players become infinitely patient. If favors provide benefits, agents rush to form partnerships at the cost of disconnecting other agents and the only perfect initial networks for which the maximum number of partnerships are formed are the complete and complete bipartite networks. The theoretical model is tested in the lab. Subjects generally play according to their equilibrium strategy and the efficient outcome is obtained over 78% of the times. Decisions are affected by the complexity of the network. Two behavioral rules are observed during the experiment: subjects accept the formation of the partnership too often and reject partnership offers when one of their neighbors is only connected to them.

Author(s): Francis Blochy, Bhaskar Duttaz, Stephane Robin, Min Zhu  
Topic: Games: Networks, N/A

The Benefit of the Doubt: Willful Ignorance and Altruistic Punishment

Robert Stuber  
WZB

ABSTRACT:

People willfully ignore information about the welfare consequences of their actions when the informational default allows for it. I analyze whether people also exploit such moral wiggle room to avoid the costly punishment of a norm violation. Studying such altruistic punishment is important as it shapes many social and legal institutions. In a laboratory experiment I employ a modified version of the dictator game with third-party punishment. A dictator makes a binary decision that affects his and the recipient's income. A third-party, whose payoff is unaffected by the dictator's choice can punish the dictator. The third-party immediately observes the dictator's action or can choose to reveal the action at no cost. I find that a substantial fraction of subjects willfully avoids learning about the choice of the dictator. In turn, the fraction of subjects choosing to altruistically punish an egoistic dictator is significantly lower when the information
The development of third party norm enforcement in eight diverse populations

Patricia Kanngiesser
Freie Universitaet Berlin

ABSTRACT:
Third party punishment and norm enforcement sustain social norms in populations and stabilize cooperation. Western middle-class children already enforce norms as third parties from a young age (Rakoczy et al., 2008). Yet, cross-cultural evidence from adults shows substantial variation in norm enforcement, both in frequency and in cultural enforcement styles (Heinrich et al., 2006; Wiessner, 2005). We investigated the development of norm enforcement in eight diverse populations worldwide (N = 390 children), focusing on two questions: (1) Does the frequency of norm enforcement vary across these populations? (2) Are there differences in norm enforcement styles? We taught participants one of two rules of how to perform a task. One participant then observed another participant perform the task (using incompatible rules). We analysed observers's reactions and interventions. We find high rates of norm enforcement across all populations, but variation in norm enforcement styles.

Cooperation and Norm-enforcement under Impartial vs. Politicized Sanctions

Philipp Krugel
Helmut-Schmidt-University Hamburg

ABSTRACT:
People usually delegate sanctioning power to a central authority, which is expected to act as an impartial institution. Hence, norm enforcement in large societies is left to persons who are not directly affected ('third parties'). This paper studies different stylized institutions with respect to central authorities' incentives for norm enforcement using a public goods game. In the first treatment, the authority is itself under observation from a higher institution. In the second treatment, public good players are able to vote on their preferred punishment scheme which leads to competition among authorities. In a control treatment the central authority can punish public good players with no possible negative consequences for herself. We find that authorities generally punish deviations from the contribution norm more severely if they have to fear negative payoff consequences. Competition among authorities usually leads to strategic punishment of the biggest deviator from the norm. Punishment is most balanced if the authority is under observation but it is also quite high compared to the other treatments. Politicized sanctions lead to the most efficient outcome in this setting.
Culture of Honor Revisited: Examining Punishment Behavior of US Southerners in Social Dilemmas

Benjamin Beranek
University of Nottingham

ABSTRACT:
Social psychologists have long argued that persistently high rates of violence or anti-social behavior in the US South can be attributed to a so-called 'culture of honor'. This culture requires an individual to stand up for himself using violence if necessary to protect his reputation. Within a social dilemma, these cultural differences in response to the cooperation and punishment behavior of others might lead to differences in social outcomes. In experiments using an innovative online platform, we find differences between Southerners and their counterparts with respect to the directionality of punishment in a social dilemma. These differences parallel the variation in effectiveness of punishment as a means of enhancing cooperation as well as the levels of anti-social punishment across societies.

Author(s): Benjamin Beranek, Simon Gaechter, and Lucas Molleman
Link: University of Nottingham

Judging Actions: Social Norms, Gender and Third Party Punishments

Pushkar Maitra
Monash University

ABSTRACT:
Social norms are often maintained in societies by disproportionately punishing women for their infractions through social exclusion, restrictions on mobility and violence. For example, a woman may be punished by her family or community for violating a social norm that bars pre-marital relationships, by restricting her mobility. In more extreme situations, such punishments might include socially sanctioned violence against women such as honor killings. Uncovering the behavioral roots of third-party punishment against women is a key step in designing successful policies to counter gender-based social violence. Our paper investigates the patterns of third-party punishments and examines sanctions against men and women for committing social infractions. We use lab-in-the field experiments conducted in India with costly rewards and punishment by third party 'judges' to examine (1) the willingness of men and women to conduct social infractions; (2) whether male and female judges differentially punish or reward the social infractions of men and women; (3) whether social structure, as represented by matriarchal and patriarchal societies, changes the perception of the social norms as well as the degree of and gender differences in punishment. Our preliminary results suggest that as third party judges, men are less willing to engage in costly punishment. Women are more willing to pay to punish social infractions by men and women.

Author(s): Lata Gangadharan, Tarun Jain, Pushkar Maitra

Measuring heterogeneity of social norm perception on the individual level

Robert Schmidt
Faculty of Economics and Social Sciences - University of Heidelberg

ABSTRACT:
We propose an incentive compatible approach to measure social norm perception on the individual level that is inspired by Krupka and Weber (2013). The approach is basically equivalent to the keynesian beauty contest as used by Krupka and Weber (2013), but subjects have a more nuanced choice set available that they can use for coordination. Specifically, instead of forcing subjects to coordinate on only one of the provided options, subjects distribute points between different options, depending on how appropriate they evaluate them. We show theoretically and experimentally that the proposed method is able to measure social norm perception more precisely, as subjects reveal their personal ranking of the provided options. This allows us to measure heterogeneity of social norm perception on the individual level and test, whether it corresponds to the heterogeneity of social norm perception on the aggregate level. Indeed, we find that heterogeneity on the individual and the aggregate level coincide, which suggests that norm perception might be measured more efficiently using the proposed method.

Author(s): Robert J. Schmidt
Topic: Games: Coordination, Social Behavior: Norms and Morals
Link: [http://www.uni-heidelberg.de/fakultaeten/wiso/awi/professuren/beheco/schmidt_de.html](http://www.uni-heidelberg.de/fakultaeten/wiso/awi/professuren/beheco/schmidt_de.html)

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**You'll Never Walk Alone: An Experimental Study on Receiving Money**

Sigve Tjotta
University of Bergen, Norway

ABSTRACT:

Is more money better than less? Not always. It depends on the situation. If more money for oneself means less money for a stranger, the majority of participants in dictator games choose less money for themselves. But if they really are alone - and thus, do not have to share with a stranger - will they always choose to receive more money instead of less? Here, I report results from seven experiments in varying contexts. On average, one-third of a total of 3,503 participants chose to receive less money instead of more. In one experiment, the majority chose to receive less money. In two norm elicitation experiments, a considerable minority considered receiving less money socially inappropriate.

Author(s): Sigve Tjotta, Department of Economic, University of Bergen
Topic: Social Behavior: Norms and Morals, Social Behavior: Other-regarding Preferences

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**Feel the Power of the Dark Side: On the Evolution of Norm Erosion**

Eugen Dimant
University of Pennsylvania

ABSTRACT:

We study the dynamic aspects of norm erosion in a non-strategic setting in which pro- and anti-social peer behavior can thrive or clash simultaneously and over time to answer the question: who wins the battle of the norms? We use a novel multi-period give-or-take donation game and vary the observability of both peer behavior and social proximity among peers across treatments. We find that observing peers facilitates the contagion of anti-social behavior, whereas pro-social behavior does not spread. In the presence of proximity, however, individuals are influenced by both pro- and anti-social behavior. We also find substantial heterogeneity with respect to how susceptible individuals are to behavioral change. These insights are particularly important from a policy perspective, in that they can inform and improve the effectiveness of norm-based interventions on the individual and collective level and help to advance our understanding regarding the role of social proximity in the evolution of norms and behavioral change.

Author(s): Cristina Bicchieri, Eugen Dimant, Simon Gaechter & Daniele Nosenzo
Supernatural sanctioning and prosocial behaviour: experimental evidence

Jana Vyrastekova
Radboud University Nijmegen

ABSTRACT:

The supernatural sanctioning hypothesis proposes that human prosocial behavior in large groups of strangers could be enforced by the belief in a punishing supernatural entity (D. P. Johnson, 2005; D. Johnson & Kruger, 2004; Benjamin Grant Purzycki et al., 2016). Under this hypothesis, prosocial behavior is independent of monitoring and repeated interactions. We extend the consequences of the hypothesis into the realm of moral behavior consistency. Under the supernatural sanctioning hypothesis, we expect that belief in punishing supernatural entity is less likely associated with moral licensing, and moral behavior is thus more stable under such a belief. We test this hypothesis using incentivized online experiments on the Amazon MTurk platform.

Author(s): Jana Vyrastekova, Rosita Verheij

License to Lie: Elicitation of social norms governing lying

Nina Serdarevic
Department of Economics

ABSTRACT:

I investigate the relationship between lying and the social appropriateness of dishonest behavior in the dice-rolling game by Fischbacher and Foellmi-Heusi (2013). Using the Krupka and Weber (2013) norm elicitation method, I show that a representative sample of Norwegians consider truth-telling to be very socially appropriate. However, participants' concern for honesty is moderated by features of the decision-making situation. Lying is considered to be less socially appropriate when the decision-maker has been told to report private information truthfully. By contrast, lying is considered to be more socially appropriate when the decision-maker has been told to misreport private information. Similarly, a separate group of subjects playing the dice-rolling game, lie more when they are told to misreport private information, whereas they are more honest when they are told to report private information truthfully. Taken together, I show that the social appropriateness of dishonesty shapes lying behavior.

Author(s): Nina Serdarevic

Green Nudges in the DSM toolkit: Evidence from Drought-Stricken Cape Town

Martine Visser
School of Economics, University of Cape Town

ABSTRACT:

Green nudges are an additional demand-side-management tool that can be used to reinforce government policy and
improve policy outcomes. In this context, social comparisons have been shown to be particularly effective in the environmental space. Against the backdrop of a severe and sustained drought, this study estimates the impact of a social-norm inspired behavioural nudge implemented by local government in Cape Town, South Africa. The insert 'which combined social comparison with a punitive threat ' was sent to households consuming excessive amounts of water. The letter admonished recipient households for unacceptable, excessive and above-average water consumption. This paper estimates the treatment effect for a subsample of these households. The impact of the intervention is calculated for various periods, namely: 2-months, 3-months, 4-months, 5-months, 6-months and 7-months after receipt of the letter. Throughout this timeline, the treatment effect remains relatively consistent: treated households reduced consumption by around 1.1 kl per month for the first six months after receipt of the letter; the treatment effect reduces to 0.9 kl seven-months post intervention. We use some back-of-the-envelope calculations to contextualise this saving against the current crisis. Assuming an average reduction of 1.1 kl per month over seven months implies a saving of 7.7 kl per households. Under Level 5 restrictions where individual consumption is capped at 87 l per person per day, this saving is equivalent to the monthly consumption of a three-person household. Households that consumed greater than 50 kl in January 2017 were eligible to receive the letter. In terms of the percentage reduction in water consumption achieved by the intervention, when only considering eligible households (i.e. a sample of households consuming at least 50 kl in January 2017), the letter induced a consistent 3% reduction in consumption (decreasing to 2.5% seven-months post the intervention). The implication is that the nudge was extremely effective in eliciting a response in a group of households that were price insensitive and slow to respond to higher tariffs and physical restrictions. Moreover, when considering the treatment effect against the entire sample (eligible and non-eligible households), the letter generated a consistent 6% reduction in consumption (decreasing to 5.3% seven-months post the intervention). It is important to note that these treatment effects were realised at the end of a period which has seen increasingly stringent physical restrictions and tariff hikes: prices in the 5th and 6th tariff blocks increased by 293% and 689%, respectively. As the warning letter induced additional water savings on top of the savings generated by these more conventional demand-side-management tools, green nudges present as an effective tool for reinforcing government policy, particularly in a time of crisis.

Author(s): Martine Visser and Kerri Brick

Topic: Social Behavior: Norms and Morals, Social Behavior: Group Behavior

Link: "School of Economics, University of Cape Town"

Whistleblowing institutions: when toothless tigers become dangerous

Sebastian Kruegel
Justus Liebig University Giessen, Germany

ABSTRACT:

Setting up a whistleblowing institution is a prominent measure in corporate governance efforts to increase compliance and ethical conduct within companies. Scientific evidence on the efficacy of such institutions, however, is scarce. This project thus addresses the research question whether compliance within an organization can be increased with the help of a whistleblowing institution. In a laboratory experiment, we implemented a repeated mini-public-goods game with a group size of three (partner design) where each group member could choose in every round between a less profitable option A and a more profitable option B. Participants' earnings were accumulated over all rounds. Every time a group member chose option B, however, there was a 0.03% risk that the earnings of all group members were lost. Thus, option B was individually more profitable, but socialized the risk of suffering a loss. In some treatments, participants could blow the whistle on group members who had chosen the risky option B. Blowing the whistle started a punishment procedure on the respective group member. In some treatments, this punishment procedure led to a sure deduction in earnings for the respective group member (deterministic punishment) and in some other treatments the deduction in earnings occurred only with some predefined probability (stochastic punishment). When the whistleblowing institution was combined with a deterministic punishment procedure, we found significantly more cooperative behavior in the sense that participants more often chose option A. This result is fully in line with the usual evidence in the public-goods literature when punishment opportunities are introduced to the game. In contrast, when the whistleblowing institution was combined with a stochastic punishment procedure, we found even less cooperative behavior in the sense that participants more often chose the risky option B. This points to a crowding-out effect of intrinsic motivations to choose
the more compliant option A, when punishment occurred with a certain probability only. Our results suggest that companies should only implement a whistleblowing institution if they have clear and strong internal penalties for misconduct and if they can afford to take each act of whistleblowing seriously. Otherwise, the implementation of a whistleblowing institution may not only cost a substantial amount of money, it may even backfire as it may crowd out employees' intrinsic motivation to comply with the company's code of conduct.

Author(s): Sebastian Krugel, Matthias Uhl


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### Experimental Evidence on the Effect of Social Mobility on Cooperation

**Jana Friedrichsen**

**HU Berlin**

**ABSTRACT:**

Although social mobility is a widely discussed topic, relatively little is known about its behavioral consequences. We argue that the degree of social mobility in a society may influence an individual's willingness to cooperate. Using a laboratory experiment we investigate how social mobility influences cooperation, measured as contributions in a public good game. We vary social mobility by exogenously modifying the extent to which an individual's outcome is driven by the starting position or the exerted effort. Our preliminary findings hint toward previously undocumented detrimental effects of social mobility on social preferences.

Author(s): Jana Friedrichsen, Daniel Muller, Juliana Silva-Goncalves

**Topic:** Social Behavior: Other-regarding Preferences, Public Choice: Public Goods and Common Pool Resource

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### On the ubiquity of social norms

**Geoffrey Castillo**

**Friedrich-Alexander-Universitaet Erlangen-Nurnberg**

**ABSTRACT:**

Social norms are now firmly established in the economic literature. They have been shown to explain behaviour in a wide variety of contexts and recently researchers have started to directly measure social norms to investigate their predictive power. However, the socialness of norms has never been questioned: if norms are truly social, then everyone should, to some degree, share the same norms. To take an extreme example a priest and a mobster should both look at a situation and report the same social norm, even if their subsequent adherence to the norm varies. To tackle this question we setup a complex game in which we can compare the social norms reported by subjects with different roles in the game, with different experiences of the game, and of different types. We find that social norms are largely insensitive to these three aspects. Social norms seem to be ubiquitous, a social construct shared and recognised by everyone. The game we use is in essence an ultimatum game with asymmetric information played between two teams of three players. A pot of money contains one of three possible amount; Members of Team A observe the amount while Members of Team B only know the distribution. In Team A, the Proposer makes a proposal on how to split the amount between the two teams. The remaining two Members of Team A, the Insiders, can send a Signal to the Members of Team B, the Outsiders, to inform them of the amount of money in the pot. If they do not send a Signal, the Insiders and the Outsiders vote on whether they accept the offer by the Proposer; the offer is implemented if a majority does, otherwise, everyone gets 0. If they send a Signal, the Outsiders are informed of the amount of money in the pot; the Proposer can make a different offer and the Insiders and the Outsiders vote on this new offer. We compare two versions of the game by manipulating how many Insiders can send a Signal: either only one or both of them can send the Signal. We look at the social norm associated with the proposal made by the Proposer as a function of the amount in the pot. For example, it
It might be very socially appropriate to offer 15€ when the pot is 30€, but very socially inappropriate when it contains 150€. We also look at the social norm associated with the Insiders' decision of not sending a signal as a function of the amount and the proposal made by the Proposer. We rely on the norm-elicitation task of Krupka and Weber (2013) which uses coordination games to measure the social norms in an incentivised way. We ask subjects to report social norms for their own version of the game but also for the version of the game they have not actually played.

We also look at the social norm associated with the Insiders' decision of not sending a signal as a function of the amount and the proposal made by the Proposer. We rely on the norm-elicitation task of Krupka and Weber (2013) which uses coordination games to measure the social norms in an incentivised way. We ask subjects to report social norms for their own version of the game but also for the version of the game they have not actually played.

We also classify subjects into different types based on several criteria. For example, we classify subjects depending on how their decision compare with the mean or the median decision. We also classify them depending on their reported belief and their degree of altruism as revealed by the Social Value Orientation measure (Murphy et al., 2011). Again, none of these matters: subjects of different types perceive the same norms.

These results further justify the attention given to social norms in the recent years. They also clarify previous methodological concerns: In norm-elicitation experiments researchers have typically used different groups of subjects to play the game and to report the norms due to 'potential response biases that may exist when the same subject participates sequentially in the norm-elicitation and behavioral experiments' (Gaechter et al., 2017). There was already some evidence that such a within-subject design was not much of a concern (D'Adda et al., 2016; Erkut et al., 2015) and our result further confirm that this is not an issue.

**Author(s):** Geoffrey Castillo, Lawrence Choo and Veronika Grimm  
**Topic:** Social Behavior: Norms and Morals, Methodology: Experimental Design, Tools and Practices

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**Social norms of allocation in the non-monetary domain**  
**Hande Erkut**  
**WZB**

**ABSTRACT:**

Investigation of generosity in the non-monetary domain is important to design allocation and bargaining mechanisms that take people's preferences for generosity into account. Previous studies have shown that people are more generous when they allocate a non-monetary pie compared to allocating a monetary pie (Davis et al. (2015), Story et al. (2015)). This study explores why generosity levels differ between the monetary and the non-monetary domains. To answer this question, I consider differences in social norms of allocation between domains. Results show that distinct social norms of allocation can explain the greater levels of generosity in the non-monetary compared to the monetary domain.

**Author(s):** Hande Erkut  
**Topic:** Social Behavior: Norms and Morals, Social Behavior: Other-regarding Preferences

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**The effect of experience on social norm perception in laboratory experiment participants**  
**Christiane Schwieren**  
**University of Heidelberg**

**ABSTRACT:**

Economic research makes extensive use of laboratory experiments for studying individual behavior in a controlled environment. However, methodological limitations of laboratory experiments are increasingly the focus of discussion. One important point is the question of generalizability in general, and the representativeness of the participants in experiments more specifically. While older criticism focused on the fact that students are not representative for a general
population, recent papers also discuss whether volunteers are representative for the population from which they are
drawn, i.e. the pool of students (e.g. Slonim et. Al, 2013; Cleave et al., 2013; Falk et al., 2013). Another line of literature
discusses whether laboratory participants behave differently depending on the experience they have with economic
experiments (Cleave et al. 2013, Benndorf et al., 2017). In the current paper, we focus on the latter and report an
experiment to shed further light on behavioral effects of extensive laboratory participation by studying how the
perception of social norms differs between experienced and inexperienced participants of laboratory experiments. We
compare descriptive norms and injunctive norms for behavior within the laboratory context and perceptions about
socially appropriate behavior between the lab context and a real world context. Finally, we elicit perceptions about how
behavior in the laboratory relates to behavior in the field. We find that differences in descriptive norms about behavior
within the laboratory context are by far the most important difference between the two groups we study ' 'new'
participants or 'lab rats' with at least 10 participations. Injunctive norms do also differ between the two groups, but to a
lower extent. It seems as if inexperienced participants have naive expectations about how subjects treat each other in
laboratory experiments. Once they learn how 'normal' or average behavior looks like in the laboratory, they adapt their
perception about socially appropriate behavior and, consequently, their own behavior. We find no evidence for selection
effects with respect to (inductively) socially appropriate behavior in the real world. We thus conclude that participants of
laboratory experiments are representative for the pool that they are drawn from, but experience in the lab shapes their
behavior and expectations for that specific context.

Author(s): Robert J. Schmidt, Christiane Schwieren, Alec Sproten
Topic: Methodology: Lab, Field and External Validity, Social Behavior: Norms and Morals

Development of Social Norms in Children: A Solidarity Game in Colombia

Daniel Celis
University of Goettingen

ABSTRACT:

Households are exposed to several external shocks that can impoverish their status quo. In order to avoid a worse off
scenario, people can cope risk using formal and informal mechanisms of insurance. Informal mutual cooperation among
households can be possible through the composition of social networks. However, it is not clear what are the
mechanisms that allow people to collaborate with each other, even when they do not receive any benefit for doing so.
The objective of this paper is to identify and understand the norms involved in the establishment and maintenance of
social networks and how risk can affect social capital formation. We study the development of solidarity networks in
children from different socioeconomic backgrounds. We implement a lab-in-the-field solidarity game in which children
face an exogenous risk exposure and have to decide how to react to it, either helping other or not. We use an
experimental design that allows us to study the role of altruism, reciprocity and reputation in a follow-up setting in three
waves. Altruism can be measured as a proportion of children who donate some amount of income, as well as the
proportion of income donated. We found that altruism increases with age, in either measure. The likelihood of following
a norm of redistributive justice also increases with age. 9-years-old children donate more when there is opportunity to
attract more help. We found also that children of all ages follow reciprocity norms, i.e., participants who donate more
receive more donations. However, reciprocity was found to be nonlinear to age in sensitivity analysis. Our objective is to
extent the panel data set in order to gain robust findings of inter- and intra-individual comprehension of altruism,
reciprocity, and reputation in social networks.

Author(s): Daniel Celis Carrillo, Pooja Balasubramanian, Marcela Ibanez

Social responsibility under market and non/market institutions

Marco Mantovani
ABSTRACT:

Individuals trade a good that can be produced using different technologies. The technology determines the amount of negative externality a third party must bear for each unit that is traded. In a laboratory experiment we compare an unregulated market -- where the technology and the price is decided by decentralized market activity -- and a regulated one -- where the decision on the technology is taken away from the market and transferred to a democratic voting system. In particular, we measure the effect of acting under the two institutions on the preferred technology of individuals. We argue this is the relevant comparison for evaluating the effect of markets on the morals of a society. Our results show the unregulated market is essentially neutral, while social responsibility is significantly eroded in the regulated market. An additional treatment shows this descends from conformist behavior that follows the collective decision process.

Author(s): Marco Mantovani, Luca Stanca


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On the adverse effects of espionage

David Dohmen
University of Konstanz

ABSTRACT:

Opportunities for spying or retrieving others' private information without consent seem nowadays abundant and have become cheaper than ever. Even though spying offers a short-term strategic advantage, this may come at a substantial future cost. In an experimental approach, we investigate the potentially adverse effects of spying by running a series of two-stage interactions. In the first stage, participants engage in a matching pennies game, in which one participant is either randomly informed about the other's decision or has the technology to spy on the other. After the first stage, inspecting the other's decision by chance or active spying is revealed with a certain probability. In a second stage, the participants without such opportunity can then punish or reward the 'spying'side depending on whether they get to know they have been subject to random inspection or spying. By varying the incentives for espionage in the first stage we also shed light on the role of different spying intentions. We find that people indeed have a pronounced aversion to spying, as they spend substantial amounts of their own resources to punish others' unwanted intrusions into their privacy. Most importantly, our experiment reveals that this aversion accrues from both the informational advantage obtained by spying as well as the act of spying itself. The fact that the spying parties very well anticipate the punishment patterns and thus are willing to invest into hiding espionage (i.e., into reducing the probability that spying is revealed) lends further support to the notion of such a spying aversion. Besides these effects, our results also indicate that participants do take the spy's intentions into account, as they adapt their punishment accordingly.

Author(s): David Dohmen (University of Konstanz) & Katrin Schmelz (University of Konstanz)

Topic: Social Behavior: Norms and Morals, Games: Information

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From foragers to farmers: A lab experiment on the evolution of human values

Antonio Morales
University of Malaga

ABSTRACT:
This paper presents a lab experiment to study the evolution of social values in ancient times, in the transition from gatherers to farmers. It is well known that gatherers and hunters saw political and wealth hierarchies as bad things while farmers saw steep political, wealth and gender hierarchies fine. We rely on Morris (2012) argument that social values are related to the modes of energy capture and design a theoretical model with a rich enough set of interactions among economic agents that allows (i) A range of different social structures (multiple equilibria that fit Morris' narrative) and (ii) The measurement of the associated social values, with a special focus on the inequality dimension. Our experimental results show that gatherers managed to achieve the efficient equilibrium, characterized by labour division between gatherers and hunters. In, the transition to the farming society, half of the societies are locked in the 'old' hunting-gathering equilibrium typical of a Foraging Economy, but with more unequal outcomes, while the other half of the group makes the transition to a Farming economy, with half of those groups displaying a fully egalitarian outcome and the remaining groups displaying less equal outcomes.

Author(s): Antonio J Morales, Ismael Rodriguez-Lara
Topic: Social Behavior: Norms and Morals, Games: Coordination
Back to session: Norms and Values (SHORT)

Do I care what you think of me? Varying observability in a public goods experiment

Hannes Titeca
University of Exeter

ABSTRACT:
In social dilemmas the level of observability by others often differs, either by design or by coincidence, and it seems intuitive that this may play a role; even when there is anonymity and/or reputational concerns are absent. As just one of many examples; the potential for negative emotions such as guilt or shame, or conversely, positive emotions such as pride or honour, may be greater when being asked to give a 'suggested donation' by a museum representative than when there is just a donation box. This paper ties in with existing psychological game theory, where beliefs can impact a person's utility directly, and a 3x1 between-subject experimental design is implemented where the level of ex-post disclosure or feedback others receive is varied across treatments in a lab-based, anonymous, one-shot, two-player public goods game. Incentivised first and second order beliefs are elicited and the results indicate that such disclosure does have an effect with a within-subjects analysis (mitigating any consensus effect concerns) finding that at least some people appear to be 'shame averse' by acting prosocially in order to avoid potential shame when observed by others. This being in addition to guilt aversion which is possible even when there is no observability by others.

Author(s): Hannes Titeca
Back to session: Norms and Values (SHORT)

Present-Biased Generosity: Dynamic Inconsistency and Social Preferences in Effort Allocation Tasks

Felix Koelle
University of Cologne

ABSTRACT:
Many situations involve both a time and a social dimension. Yet, despite their fundamental role in economics, the interaction between time preferences and social preferences has received little attention. Here, we provide an experimental test of the link between altruism and present bias. In our longitudinal experiment, using generalized dictator games, subjects have to make intertemporal real-effort allocation decisions of unpleasant tasks. We find that agents' generosity is subject to dynamic inconsistency: they allocate fewer tasks to themselves when the working date is
in the present compared to when it lies in the future, but no similar effect is present when comparing decisions that only affect future work dates. Such behavior can be explained by a model in which people exhibit present bias for own consumption but not for other's consumption. This interpretation is supported by results from two additional sets of intertemporal allocation decisions without any externalities: we find that people exhibit a systematic present bias when deciding for themselves, while no such dynamic inconsistency is observed when making the same choices on behalf of someone else.

Author(s): Felix Koelle and Lukas Wenner
Topic: Social Behavior: Other-regarding Preferences, Decision Theory: Preferences
Back to session: Other-regarding Preferences 1

A Meritocratic Origin of Egalitarian Behavior

Johanna Mollerstrom
George Mason University

ABSTRACT:

Meritocratic fairness preferences are held by many, and imply that inequalities are only viewed as acceptable if they come about through factors such as merit or effort. When there is no uncertainty about who the best performer is, being a meritocrat is straightforward, and behavior in such situations has been studied extensively. We focus instead on the highly realistic, but previously under-studied, context where it is not clear if the highest earner is also the best performer. Under such uncertainty, meritocrats trade off making the larger (but less likely) mistake of rewarding the wrong person with the smaller (but more likely) mistake of not rewarding the right person enough. We show theoretically that meritocrats will be more likely to equalize resources, i.e. to exhibit an egalitarian behavior, if they put a larger weight on avoiding large mistakes as opposed to merely minimizing the expected error. Using a lab experiment, we show that among the numerous meritocrats that are present in our sample, behavior consistent with such an overweighting is very common. We further document that this, in line with our theoretical prediction, leads to the meritocrats' behavior being pushed significantly in the direction of an egalitarian style, but away from a libertarian style, behavior.

Author(s): Alexander Cappelen, Johanna Mollerstrom, Bjorn-Atle Reme, Bertil Tungodden
Topic: Social Behavior: Other-regarding Preferences, N/A
Back to session: Other-regarding Preferences 1

Welfare-based altruism

Pauline Vorjohann
Humboldt University of Berlin

ABSTRACT:

Why do people give when asked, but prefer not getting asked, and even take when possible? We show that standard behavioral axioms including separability, narrow bracketing, and scaling invariance predict these seemingly inconsistent observations. Specifically, these axioms imply that interdependence of preferences ('altruism') results from concerns for the welfare of others, as opposed to their mere payoffs, where individual welfare is captured by the reference-dependent value functions known from prospect theory. The resulting preferences are non-convex, which captures giving, sorting, and taking directly. Re-analyzing choices of 981 subjects in 83 treatments covering many variants of dictator games, we find that individual reference points are distributed consistently across studies, allowing us to classify subjects as either non-givers, altruistic givers, or social pressure givers and use welfare-based altruism to reliably predict giving, sorting, and taking across experiments.

Author(s): Yves Breitmoser, Pauline Vorjohann
Topic: Social Behavior: Other-regarding Preferences, N/A
Intertemporal Social Preferences

Giang Tran  
Maastricht University

ABSTRACT:

Charitable giving is traditionally analyzed as a social decision where agents decide how to allocate welfare between themselves and others. In this type of situations, usually the assumption is that the cost incurred by the donor and the benefit received by the beneficiary happen without any time delay. However, in the context of charitable giving often time elapses between the costs incurred by the donor and the benefit received by the beneficiary. To understand giving behavior in such situations, it is imperative to investigate not only how people take others' wellbeing into account and how they discount the future, but also if and how these two aspects interact. In this paper, we aim at revealing the relationship between time delay and giving. First, we derive theoretical predictions of the effect of time delay on giving according to a dual self-model and a social preferences model allowing for different discount rates of oneself and others. Second, using a modified dictator game, we vary (between-subjects) the timing of payments to the donor and the beneficiary generating situations where both receive the earnings immediately, both in 5 weeks, or one immediately and the other in 5 weeks. To investigate whether giving depends on the efficiency of giving and how it interacts with time delay, we modify (within-subjects) the donors' endowments and the efficiency of giving. This feature of the design allows us also to test if subjects' decisions are rationalizable according to GARP and if this varies with time delay. We also elicit time preferences for self and others to control for differences in the donor's time preferences and the perceived time preferences of the beneficiary. Our results show that none of the examined theoretical models alone can organize our data. We find that discount rates for self and others are not significantly different. Time delay does not affect giving when aggregating over all endowments and efficiency rates, but it affects the sensitivity to different efficiencies of giving: only when both donors and beneficiaries receive their payments immediately, we observe a positive relationship between efficiency and giving. Giving decisions respect GARP also in the presence of time delay, suggesting that choices can be rationalized by a well-behaved utility function. We find evidence of a gender effect. At the aggregate level, women are more generous than men and give less with increasing efficiency of giving, while men display the opposite pattern and give more as the efficiency of giving increases. Regarding time preferences, men require a higher interest rate when discounting payoff for themselves than women, indicating that they are more impatient than women.

Author(s): Giang Tran, Marcello Negrini, Matthias Wibral, and Arno Riedl  
Topic: Social Behavior: Other-regarding Preferences, Applied Economics: Charitable Giving

In Search of Homo Relationalis. Empathy and Strategic Behavior in Simple Experimental Games

Vittorio Pelligra  
Dept. of Economics, University of Cagliari

ABSTRACT:

The ability to empathize is a fundamental social competence. Being able to ascribe intentions, desires, beliefs to other people (cognitive empathy) and to understand and, to some extent, share their emotional states (affective empathy) is what, ultimately, renders us 'social animals', 'relational beings': individuals capable of properly living in a community, to anticipate others' behavior in order to foster our interests but also to coordinate and cooperate with them to achieve mutual benefits. Despite this important role for the understanding of interpersonal behavior, economists and game theorists have devoted little attention to how empathy interacts with preferences, beliefs and choices. In this paper, we present the results of a laboratory experiment designed to investigate whether and how heterogeneity in individuals'
empathic abilities affects observed differences in their behavior in a variety of simple economic games. We find a positive impact of empathy on individuals' willingness to give in a Dictator Game and on their willingness to accept lower offers in the Ultimatum Game; in the Trust Game subjects with higher empathy tend to trust more; we also find a significant trade-off between empathy and depth of strategic thinking as measured in the guessing game.

**Author(s):** Vittorio Pelligra, Tommaso Reggiani, Alejandra Vasquez  
**Topic:** Social Behavior: Other-regarding Preferences, Psychology and Biology: Emotions  
**Back to session:** Other-regarding Preferences 2: Strategic Interaction

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**Fairness Intentions in Strategic Interaction: An (interactive) eye-tracking study**

Jan Hausfeld  
University of Konstanz

**ABSTRACT:**

We investigate whether gaze patterns reveal intentions to others. Intention can mean a planned action but also the motive underlying an action. We investigate whether people are able to use gaze patterns (process information) to infer intention especially when choices are nondiagnostic vs diagnostic. In different experiments, we compare various formats of process and choice information, investigate how people use these kinds of information for future interaction, and explore how people strategically use (transmit) the process information.

**Author(s):** Hausfeld, Jan; Fischbacher, Urs; Renerte, Baiba  
**Topic:** Social Behavior: Other, Psychology and Biology: Neuroeconomics  
**Back to session:** Other-regarding Preferences 2: Strategic Interaction

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**Coase Theorem in a Digital Environment: A Replication and Extension**

Ryan Rholes  
Texas A&M University

**ABSTRACT:**

We replicate and extend the work of Hoffman and Spitzer (1982, 1985 ' HS hereafter) on the Coase Bargaining Theorem. We test Coase theorem in a 2x2, between-subjects design varying both the mechanism by which we assign property rights (random or contest) and whether the experiment is conducted in a face-to-face or a digital bargaining environment. Our question is whether digitization of the bargaining environment, which ought to reduce transaction costs, introduces behavioral wedges into negotiations that induce inefficiency. As did HS, we reinforce the assignment of property rights by also using either neutral (with random assignment) or strong language (with the contest treatment) to vary the level of moral ambiguity in the assignment of property rights. We replicate HS with the finding that the random assignment of property rights and moral ambiguity, relative to assignment via a competitive game and no moral ambiguity, yields a higher incidence of equitable final payoff distributions. Additionally, we extend their work to a digital environment, where we find that subjects reach efficient (total payoff maximizing) outcomes significantly less often than do subjects who bargain face-to-face. In addition, subjects become significantly more self-regarding whenever negotiating in a digital environment. Given that efficiency and other-regarding behavior are not invariant to negotiating environment, these results suggest that Coase's theorem may require additional behavioral considerations; in particular, the theorem may lack predictive power whenever negotiations occur under the veil of anonymity.

**Author(s):** Jesse Backstrom, Catherine Eckel, Ryan Rholes and Meradee Tangvatcharapong  
**Topic:** Games: Bargaining, Social Behavior: Communication  
**Back to session:** Other-regarding Preferences 2: Strategic Interaction
Betrayal Aversion and the Effectiveness of Incentive Contracts

Stephan Muller
Goettingen University

ABSTRACT:

In this paper we study the impact of betrayal aversion on an agent's effort provision if the principal has some discretion regarding the agent's monetary compensation. We show theoretically that an agent who works under a nonbinding bonus contract faces a trade off in his effort choice between the likelihood and the level of betrayal. Thus, depending on which effect predominates, betrayal aversion may either undermine or underpin the effectiveness of bonus contracts to induce effort. The data of our experiment reveal a strong detrimental effect of betrayal aversion. If the principal promises to pay a bonus for sufficiently high effort then employees with low betrayal aversion show a by more than 50% higher performance whereas this promise has no effect on subjects with high betrayal aversion. Hence, our findings identify an additional hidden cost of economic incentives.

Author(s): Stephan Muller, Holger Rau
Topic: Applied Economics: Labor Market, Decision Theory: Preferences
Back to session: Other-regarding Preferences 2: Strategic Interaction

Socioeconomic stratification and stereotyping: Lab-in-the-field evidence from Colombia

Francesco Bogliacino
Universidad Nacional de Colombia

ABSTRACT:

In this study, we test the hypothesis that the Colombian system of socioeconomic stratification (SES), which ranks dwellings from one to six to calculate utility (public services) rates, may induce discrimination. To this end, a field experiment with around 1000 participants from Bogota is carried out. The design includes a combination of a trust game and a dictator game and SES-contingent decisions. Results exclude the presence of pure preferences for discrimination, yet they confirm that low strata are associated with stereotypes of low trustworthiness. We also observe significant prosocial behavior in the low-income population, and most strikingly, we do not observe any difference in trustworthiness across different income levels.

Author(s): Francesco Bogliacino, Laura Jimenez, Daniel Reyes
Topic: Social Behavior: Other-regarding Preferences, Field Experiments: General
Link: https://link.springer.com/article/10.1007/s12232-017-0285-4
Back to session: Other-regarding Preferences 3

The Effect of Feedback Content and Timing on Self-other Gap in Risk-taking

Hyunkyong Lee
New York University

ABSTRACT:

Previous experiments on delegated decision making find seemingly contradictory results: some experiments find that people take greater risks when they decide for others than for themselves, while other studies find the opposite. My lab experiment tests a hypothesis that the content and the timing of feedback drive the mixed results. In the experiment, I vary the feedback content and timing. Subjects either learn the outcome of only the chosen option or the outcome for both the chosen and the unchosen option. Feedback is provided immediately after each decision or after a sequence of
ten decisions. The self-other gaps in risk-taking found in my experiment match the pattern found across previous experiments. When subjects receive an immediate feedback on the outcome of both the chosen and the unchosen options, they make a risky shift. That is, subjects take greater risks for others than for themselves. If I alter either the timing or the content of feedback, the risky shift disappears. If I alter both the timing and the content of feedback so that the feedback is given at the end, only on the outcome of the chosen option, I find a risky shift again. I present a theoretical model and analyze how subjects' risk taking behavior evolves as they make more decisions.

Author(s): Hyunkyong Lee
Topic: Social Behavior: Other-regarding Preferences, Decision Theory: Risk
Back to session: Other-regarding Preferences 3

To segregate, or to discriminate - that is the question: experiments on the effect of social identity on prosocial behavior

Mariana Blanco
Universidad del Rosario

ABSTRACT:

We study, in a laboratory experiment, whether individuals use various sources of social group identity to choose whom to interact with in a situation that is potentially beneficial to the people involved (i.e. segregation). In turn, if such social identity may explain differential treatment, in terms of resource allocation, across social groups (i.e. discrimination). In particular we study whether social identity originating either from shared preferences, shared socioeconomic status or shared skills, determines segregation and discrimination in a Latin American city. We find socioeconomic status does not determine segregation decisions but social group labels based on same skills and similar preferences do. There is no evidence that social group labels determine discriminatory behavior. Individuals seem to have expectations aligned with such behaviors.

Author(s): Mariana Blanco & Jose-Alberto Guerra
Topic: Social Behavior: Other-regarding Preferences, Applied Economics: Charitable Giving
Back to session: Other-regarding Preferences 3

The transmission of prosocial preferences in principal-agent experiments with incomplete contracts

Wiebke Szymczak
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ABSTRACT:

Hart and Zingales (2017) propose that accountability is a moderator of social value orientation in corporate decision-making. They claim that prosocial business owners are more likely to account for negative externalities of their production decisions if they are directly responsible as opposed to having delegated production decisions to managers. In this study we investigate this claim in a series of multi-task principal-agent experiments building on the experimental design of Fehr and Schmidt (2004). We ask participants to allocate their efforts to one or a mix of three different tasks, representing hazardous profit-maximization, prudent profit maximization and charitable donations. To test the claim that governance structures affect prosocial behavior, we analyze whether the social outcome of participants' effort allocations differs for delegation contracts with different degrees of responsibility.

Author(s): Wiebke Szymczak
Topic: Games: Other, Social Behavior: Norms and Morals
Back to session: Other-regarding Preferences 3
Does Collectivistic and Individualistic Institution Make People Different? Field Experimental Evidence from Chinese Villages

Yefeng Chen
Zhejiang University

ABSTRACT:
Mainland China has undergone significant institutional changes in 1980s when most villages transformed from collectivism to individualism. As one of the exceptions, Yakou village is called 'the last People's Commune in China'. In this paper, conducting a randomized field experiment with more than 500 villagers, we compared the villagers' moral and economic behaviors in Yakou and its neighboring individualistic village, Pansha. We found people participating in collective farming are more altruistic, trustworthy, and willing to contribute in cooperation, but have higher discounting rates and lower willingness for competition than people working individually. Similar significances in altruism, trust, and cooperation behaviors were also found between children living in these two villages. Our findings provide valuable experimental evidence in the unique background of China's institutional transitions about how collectivistic and individualistic institution shape different behaviors.

Author(s): Hang Ye, Shu Chen, Jun Luo and Yefeng Chen*

A Cross-Societal Comparison of Cooperative Dispositions and Norm Enforcement

Till Weber
University College Dublin

ABSTRACT:
All societies face a multitude of small- and large-scale cooperation problems. Societal differences in culture and institutions have previously been identified as a key driver of individual cooperative behaviour when making a trade-off between personal benefits and societal welfare. A possible explanation is that culture and institutions influence cooperative dispositions, beliefs, and the propensity to punish free-riding, all of which jointly affect cooperative efforts. We measure these important factors using variants of public goods games with student participants in four countries (Morocco, Turkey, UK, US). We find that differences in the cooperation rates across societies cannot be explained by differing cooperative dispositions alone. Beliefs about other people's cooperative efforts and propensities to punish free-riding help to explain cross-societal variation in behaviour. Furthermore, costly altruistic punishment in our one-shot game is remarkably similar across different societies. This contrasts previous studies that use repeated games to investigate cross-societal differences in punishment. Thus, societal differences in punishment are likely to be driven by strategic play or retaliation emerging in repeated interactions. Interestingly, we find that emotional responses to free riding are similar across societies, making negative emotions a likely driver of costly altruistic punishment.

Author(s): Till Weber, Benjamin Beranek, Simon Gaechter, Fatima Lambarraa and Jonathan Schulz

Are Economic Preferences Shaped by the Family Context? The impact of birth order and siblings' sex composition on economic preferences

Lena Detlefsen
Kiel Institute for World Economy

ABSTRACT:

Author(s): Lena Detlefsen

Back to session: Other-regarding Preferences 4: Determinants
ABSTRACT:

Economic preferences shape the outcomes of one's life to a large extent. For instance, time preferences are related to school performance and thus educational achievements, meaning that they affect labor market performance and lifetime income (Castillo et al., 2011; Golsteyn et al., 2014; Alan and Ertac, 2017). Risk preferences have an influence on financial behavior (Meier and Sprenger, 2010, 2013), and social preferences, like trust and reciprocity, are important for cooperation within a society and can even help markets work efficiently (Fehr et al., 1993; Knack and Keefer, 1997; Zak and Knack, 2001; Kerschbamer et al., 2017). Only in more recent years, economists have become very much interested in the formation of economic preferences. Promoting a better understanding of the development of economic preferences promises to provide insights into the sources of heterogeneity in economic preferences among subjects, and therefore also reveals potential anchor points for policy interventions to mold economic preferences. While genetic studies show that some variation in economic preferences can be explained by genetic variation (Cesarini et al., 2009; Zychur et al., 2009), large parts of differences in economic preferences still require additional explanations that are related to different environments in which subjects grow up and make economic choices. Besides looking at the influence of schools and peer groups, the influence of families has naturally captured lots of attention in this literature about the formation of economic preferences. For instance, several important studies have addressed the influence of the socio-economic status of parents on children's economic preferences, typically finding that higher socio-economic status of parents goes along with more patient children who are also more risk tolerant, more often prosocial and more competitive (Dohmen et al., 2012; Kosse and Pfeiffer, 2012; Deckers et al., 2015; Almas et al., 2015). Besides parents, it is straightforward to see that siblings also have an influence on each other. This is due to the fact that siblings compete for parental attention, inducing them to adapt their behavior to reach this goal, which may lead to differentiate one's behavior from siblings' behavior to capture more attention (Sulloway, 1996; Hertwig et al., 2002). However, siblings can also learn from each other by imitating other siblings, often the older ones who have higher status (Rust et al., 2000). In fact, there is an influential literature showing that birth order affects outcomes. For example, later born children have lower IQ (Bjerkedal et al., 2007; Black et al., 2011), lower education (Black et al., 2005; Booth and Kee, 2009; Haerkonen, 2014), higher mortality risks (Barclay and Kolk, 2015; Modin, 2002), they earn less (Behrman and Taubman, 1986; Bjoerklund and Jaentti, 2012) and are more likely to smoke (Black et al., 2016). The development of cognitive skills is substantially influenced by older siblings (Dai and Heckman, 2013). Interestingly, there is much less evidence on how birth order affects economic preferences, with the latter then having an impact on economic outcomes. Moreover, the related literature typically focuses on birth order effects and puts less emphasis on siblings' sex composition (referring to whether siblings have the same sex or are of different sex). Given that birth order and sibling's sex composition are important for parental behavior and sibling's interaction and potential imitation or differentiation (Whiteman et al., 2007), we are going to study how birth order and siblings' sex composition affects three key domains of economic preferences, namely time, risk and trust preferences. The aim of this study is to disentangle the birth order and the siblings' sex composition effect on economic preferences, and check whether these effects also interact with a subject's sex. We present an experimental study with 525 adolescents, all attending 10th grade and on average 15 years of age. We focus in our study on adolescents and do this for several reasons. First, this age is of immense practical importance and of scientific interest, as it is right at the border between having to accept the decision of one's parents and making one's own (significantly influential) life decisions for the first time. Second, adolescence is a phase in life which sets the cornerstone for lifetime outcomes such as educational choices, or the creation of habits which are known to be hard to change once acquired (smoking, drinking or unhealthy diet). Third, adolescents are still integrated into their family context and, therefore, family composition should not be diluted by developments in life after leaving the parents' house. Fourth, work on siblings' role in gender development suggests that the differentiation of siblings (in relation to other siblings) sets in during adolescence as youths focus on developing their unique identities (Grotevant, 1978; McHale et al., 2001). The experiment with 10th graders was run during regular school hours, thus minimizing drop-outs and self-selection issues. The experimental elicitation of time, risk, and trust preferences was incentivized, and questionnaire data allows us to relate experimental choices to the family context, in particular to both birth order and siblings' sex composition. The set of economic preferences investigated, and the opportunity to speak to both the importance of birth order and siblings' sex composition and to identify the relative effect of both factors sets our paper apart from previous studies. Overall, the research in economics regarding birth order, siblings' sex composition and economic preferences is still scarce. Some important studies focus on risk preferences ' one of the three types of economic preferences we are looking at ' and the influence of the family context. Dohmen et al. (2012) show that first born children are more similar to their parents in terms of risk preferences than later born ones and Alan et al. (2017) report that the correlation between mother's and daughter's risk preferences is very strong and significant, while it is much weaker and insignificant for mothers and boys. Consistent with this view, later born children have been found to be less risk averse than first borns using field behavior data (Yiannakis, 1976; Sulloway and Zweigenhaft, 2010).
A large Swedish survey sample of adults, Lampi and Nordblom (2011) relate both time and risk preferences to birth order, finding that later born children are less patient than first born children. Three features distinguish their work from ours. Their survey did not involve incentives, they had adult participants, and they did not investigate trust. The only studies we know that focus on birth order effects and use incentivized experiments are the studies by Courtiol et al. (2009) and Okudaira et al. (2015). Courtiol et al. (2009) found in a sample of French students that first born children are less trustworthy than later born children in a standard investment game by Berg et al. (1995). They used an incentivized experiment, but in comparison to our paper they did not relate their findings to siblings' sex composition, nor did they study risk or time preferences. Furthermore, while we studied adolescents for the reasons explained above, Courtiol et al. (2009) let adult university students participate in their study. Okudaira et al. (2015) examined competitive behavior and reported no birth order effects. Yet, they found that the siblings' sex composition matters; men with older sisters were less competitive than men with older brothers in their Japanese high school sample. So, they considered both birth order and siblings' sex composition, as we do, but we consider a much broader set of economic preferences by focusing on risk, time, and trust preferences. We find that birth order is one important factor for all three preferences and, moreover, that for trust and risk preferences, the siblings' sex composition has a significant impact as well. First born children are in general more patient and trust less than second born children. However, while patience is independent of the siblings' sex composition, trust increases for boys in mixed sex families. Additionally, second born children are only more risk taking in single sex families. In mixed sex families children vary in their risk preferences with regard to the gender. Boys are more risk taking than girls, but there is no birth order effect.

Author(s): Lena Detlefsen, Andreas Friedl, Katharina Lima de Miranda, Ulrich Schmidt and Matthias Sutter
Topic: Social Behavior: Other-regarding Preferences, Psychology and Biology: Gender and Individual Differences

The Power of Relative Proportion - An Experiment of Income Allocation

Wenkai Sun
Renmin University of China

ABSTRACT:

This study examines the framing effect of relative proportion versus absolute amount in income allocation in ultimatum game. The hypothesis is that absolute amount and proportion are weighted differently according to total endowment and allocation methods because the allocation method shifts the reference point. We design an ultimatum game experiment conducted on the WeChat platform where two people allocate a given endowment between them. Participants are randomly divided into two treatment groups and three different endowment levels. In the control group, allocation proposal between a pair is expressed in absolute amount. In the treatment group, allocation proposal is indicated as a proportion of their total endowment. We examine how proposers' offer decisions and receivers' acceptance decisions are affected by the proposal treatment and endowment levels. We find that the proportion treatment increases average proposed offer in the high endowment condition, not in the medium and low endowment conditions. The proportion mechanism may have shifted the reference point of the proposers from an external reference point of daily life to the current endowment level. These findings have important implications for many cases of income distribution such as wage allocation, public good contribution, and tax distribution.

Author(s): Wenkai Sun; Xianghong Wang
Topic: Decision Theory: Beliefs, Games: Bargaining

Revealed Social Preferences

Arthur Dolgopolov
George Mason University
ABSTRACT: We apply revealed preference approach to test the consistency of observed behavior with theories of social preferences. In particular, we provide revealed preference criteria for the observed set of choices to be generated by inequality averse preferences and by other-regarding preferences that exhibit increasing benevolence. Moreover, we apply these tests to some experimental data on dictator games. Finally, we show how to apply constructed tests to other games commonly used to study social preferences, including ultimatum, investment and carrot-stick games.

Author(s): Arthur Dolgopolov, Mikhail Freer
Topic: Social Behavior: Other-regarding Preferences, Decision Theory: Preferences
Link: https://ssrn.com/abstract=3111494
Back to session: Other-regarding Preferences 5: Equality

Identifying Referents: An experimental study

Hugh Sibly
University of Tasmania

ABSTRACT:
People compare themselves to others. People use reference groups as a frame of reference to evaluate their standing in a variety of domains. Festinger (1957) suggests that a person's reference group consists of people who are 'close to [their] own ability'. There are two natural referents for an individual: their past selves experienced and their peers. Which referent is utilised will result in important differences in economic outcomes. In this paper, we use a two stage experiment to investigate if, and how, people use their past selves or peers as referents. The first stage sets up the past/status quo payment. In the second stage participants undertakes a 3-person mini-ultimatum game. The 3-person mini-ultimatum in the second stage is used to assess the relative importance of the two potential referents. It is found that peer payment has a significant effect on offers, particularly when payments vary across the two stages.

Author(s): Paul Blacklow, Ian McDonald, Hugh Sibly
Topic: Social Behavior: Other-regarding Preferences, Decision Theory: Preferences
Back to session: Other-regarding Preferences 5: Equality

How do physicians prioritize? A lab experiment with heterogeneous patients

Franziska Then
University of Duisburg-Essen

ABSTRACT:
Allocating scarce medical resources like time, infrastructure or budgetary funds to patients is often up to the physician. Health care planners in publicly funded healthcare systems emphasize the idea that resources should be given to those patients who benefit the most. However, little is known about distributional preferences in health care. Previous experimental studies mainly investigate the weight that physicians attach to patient benefit relative to their own profit. Yet, physicians usually treat several patients and face decisions regarding the simultaneous allocation of resources between patients. In the present study, we incorporate resource rivalry among patients into the physician's decision problem. We run a laboratory experiment in which we systematically vary the patients' characteristics. Subjects in the lab take the role of physicians and patients and are matched in groups of three, with one physician facing two patients. Physicians determine their own payment from capitation and the quantity of medical services allocated to each patient. The two patients vary in their marginal benefit and optimal treatment quantity. Subjects in the role of patients receive health benefit in monetary terms. We employ a within-subjects design with 58 independent observations of physicians. When allocating limited resources between themselves and several patients, most physicians prefer equality over efficiency. In particular, physicians devote a lower share of their budget to patient treatment when treatment is most
efficient. When allocating resources between asymmetric patients, most subjects exhibit a tendency towards equal
treatment of patients. They mainly pursue equal patient benefit. While policy makers posit that priority should be given
to those patients who benefit most from treatment, our results question whether this approach mirrors preferences of the
public and whether it resembles actual physician provision behavior.

Author(s): Franziska Brendel, Lisa Einhaus, Franziska Then
Topic: Social Behavior: Other-regarding Preferences, Applied Economics: Other
Back to session: Other-regarding Preferences 5: Equality

A little uncertainty diminishes social preferences

Fabian Paetzel
Helmut Schmidt University Hamburg

ABSTRACT:

Social preferences are a function of uncertainty. With increasing uncertainty about the payoff distribution, social
preferences are becoming less important. In a deterministic setting, some subjects have specific social preferences. If the
same subjects are confronted with a probabilistic environment, meaning ex ante and ex post payoffs do not have to be
necessarily equal, the before measured social preferences are diminishing. In a probabilistic environment, subjects can
be worse-off ex post with a specific probability. Even though this probability can be very small but the expected value is
relatively high, subjects want to avoid to become worse-off. We utilize a standardized dictator game to check whether a
little uncertainty is already enough to sharply decrease social preferences. To account for uncertainty, subjects have to
deal with different lotteries. Lotteries vary with respect to their winning probability. Between treatments, we vary whom
the lottery is assigned to (dictator or recipient) and the framing of uncertainty (gain framing and loss framing). We also
run control treatments without uncertainty. We find that if the lottery is assigned to the dictator, a little uncertainty yields
a dramatic drop in transfers. In the treatments in which the lottery is assigned to the recipient, such a negative effect is
not identifiable. In the treatments without uncertainty, adjustments in transfers are proportional to the increase in
endowments. Our contribution to the literature is an improved understanding of decision making under uncertainty if
subjects follow not only selfish preferences.

Author(s): Fabian Paetzel, Ulrich Schmidt and Stefan Traub
Topic: Social Behavior: Other-regarding Preferences, N/A
Back to session: Other-regarding Preferences 6: Risky Contexts

Betrayal Aversion and Identity in the Longer Run

Maria Polipeciu
Maastricht University, Research Centre for Education and the Labour Market

ABSTRACT:

A growing body of research finds that in equally risky situations, people accept the same amount of risk more often if its
source is a random device rather than a person. In the context of trust games, Bohnet and Zeckhauser (2004) called this
disparity in willingness to accept risk 'betrayal aversion'. More generally, it has been referred to as 'strategic risk
premium'. We build upon this research by exploring how the identity of the opponent affects this premium in two
situations: one in which players' interests are aligned (a sequential stag hunt game) and one in which they are not (a trust
game). Comparing behavior in the two games allows us to uncover the mechanisms driving betrayal aversion.
Additionally, we examine the long term development of strategic risk premiums in both games, towards in- and
outgroup members. Participants in our study are students who are randomly assigned to 'study and leisure'groups. They
play the games twice: at the beginning of the 2017/2018 academic year and at the end (planned: May 2018). Preliminary
results indicate no ingroup-outgroup differences initially. In the pooled data for the two games, we find no strategic risk
premium in the sequential stag hunt game; in the trust game, the premium is driven by individuals with low self-reported
Self-reported & Revealed Trust: Experimental Evidence

Andis Sofianos
University of Heidelberg

ABSTRACT:
I study the relationship between self-declared trust attitudes - using a well-recognised and established personality questionnaire - and trust choices in an induced infinitely repeated trust game. I find that self-reported trust measures are valid. An important component of the design is that first movers are not privy to the choices made by their partners. This design feature, coupled with an uncertainty element introduced in determining the first mover's final payoff, allows me to analyse how first movers react to bad outcomes. Trusting individuals are more likely to give the benefit of doubt to others and they do so in higher proportions. Analysis of the incentivised subjective beliefs that were elicited reveals that the effect of personality traits on trust choices is independent of the effect of subjective beliefs. This suggests that individuals who describe themselves as trusting choose to trust more, due to a `warm glow' effect. I find that the personality trait effect is of comparable magnitude to that of risk attitudes. Finally, I also present evidence that trusting individuals do not blindly trust indicating that they need not are easy to take advantage of.

Measuring tastes for equity and aggregate wealth behind the veil of ignorance

Yan Xu
Erasmus University of Rotterdam

ABSTRACT:
The trade-off between aggregate wealth and individual wealth inequality is a societal conundrum. At the individual level, a common framework to assess this trade-off is by the ranking of alternative societal wealth distributions in which one does not know their own position in the distribution but rather that she will equally likely assume any position in the distribution. When she chooses a distribution from a set of possible distributions, her pure preference with respect to the aggregate wealth-inequity trade off is confounded by her aversion to risk her selection generates over the marginal distribution of her own wealth. We introduce a new experimental procedure to control for this risk aversion. Individuals are presented a series of paired choice tasks: one is the consumer problem of choosing a portfolio of Arrow-Debreu contingent claim assets over two equally likely states, one good and one bad, and the other is choosing the wealth profile of a two-person economy in which they are equally likely to be the rich or poor individual. 'Income' and 'prices' are the same within a paired set of tasks, thus the sets of marginal distribution over one's own wealth is the same for both tasks. We find roughly equal numbers of experiment participants allocate more to the poor state than the bad state (revealing inequity aversion), equal allocations in the two tasks (revealing social indifference), and allocating less to the poor state than the good state (revealing inefficiency aversion). Revealed preference analysis indicates that most participants choices are consistent with the maximization of non-homothetic and quasi-concave utility functions for each setting. Further revealed preference analysis reveals clusters of individuals who indifference curve are more/less convex in the risk setting versus the distribution one.
How Institutions Shape Preferences: Experimental Evidence from a Land Tenure Reform Implemented as a Randomized Control-Trial

Marco Fabbri
Erasmus University Rotterdam

ABSTRACT:
I investigate how a major land tenure reform affects pro-social preferences in a West African society where agricultural land is the main households' asset. The reform consists in registering customary tenure rights over agricultural land that are traditionally characterized by collective property and informal possession, providing to right holders a new legal status akin to private ownership. Identification capitalizes on the randomized control-trial implementation of the reform that used a public lottery to select villages who had the reform implemented. Seven years after the reform implementation, I conduct lab-in-the-field experiments to collect data on cooperation and trust choices in the most densely populated and market integrated rural province country-wise. Results show that the formalization of land rights significantly increases participants' contribution in a public good game (40%) and trustor's transfer in a trust game (35%). I then replicate the study in a rural province that shares the same set of formal institutions and experienced the same reform but is characterized by significantly lower population density and market integration. For participants in the second study the reform has no effects on trust levels and it determines a reduction of cooperation.

Author(s): Marco Fabbri
Topic: Decision Theory: Preferences, Applied Economics: Economic Development
Back to session: Preferences 1

The Endowment Effect in the Future: How Time Shapes Buying and Selling Prices

Shohei Yamamoto
Universitat Pompeu Fabra

ABSTRACT:
Little is known about the endowment effect for transactions that will happen in the future. Do sellers' and buyers' valuations become more different or more similar the further in the future the product transactions are? We conduct four studies in which the transaction timing of three different products is systematically changed for buyers and sellers. The first three studies show that delaying transactions into the future increases the endowment effect across products, and we show that this pattern is produced by gains being discounted in time substantially more than losses. The fourth study also rules out the possibility that this pattern is caused by sellers anticipating becoming more attached to the products with time.

Author(s): Shohei Yamamoto & Daniel Navarro-Martinez
Topic: Decision Theory: Preferences, Methodology: Lab, Field and External Validity
Back to session: Preferences 1

Higher Order Risk: An Application To Savings of the Poor in Bogota

Marcela Ibanez
University of Goettingen

ABSTRACT:

Higher order risk preferences play an important role in economics, most prominently in the theory of saving under uncertainty. Leland (1968) suggests that under uncertain income prudent individuals increase savings as a precautionary measure. To test this proposition we present a new experimental method to elicit higher order risk preferences. The method we propose uses a non-parametric estimation of the utility function using P-splines. Using this method we can compute well-known theoretically derived measures of the intensities of prudence and risk aversion. We find comparable results to earlier studies with respect to classification of individuals as prudent or imprudent among a sample of poor households in Bogota. In addition, the results strongly support the theoretical prediction that uncertainty leads to increases in savings for prudent individuals. This suggests that this population group lacks alternative options to smooth consumption.

Author(s): Marcela Ibanez, Gerhard Riener, Sebastian O. Schneider

Topic: Decision Theory: Preferences, Methodology: Other

Revealed Privacy Preferences: Are Privacy Choices Rational?

Yi-Shan Lee
University of Zurich

ABSTRACT:

The development of effective privacy policies rests critically on the question of whether people are capable of engaging in rational tradeoffs regarding the use of their personal information. This study employs an economic approach to investigate the extent to which people's decisions regarding the sharing of personal information exhibit consistency with an underlying rational preference for privacy. We develop a novel experiment in which people allocate privacy levels between different personal information items, allowing us to classify people depending on whether their choices are consistent with the Generalized Axiom of Revealed Preference. We find more than 63 percent of subjects act consistently with a rational preference ordering when allocating privacy levels, despite the substantial heterogeneity of privacy attitudes. We further investigate the extent to which these revealed privacy preferences can be measured by monetary equivalents and whether preferences elicited over choices in our experiment have any predictive power for explaining real-world privacy behavior. We find that the classification of rationality from choices is also predictive of monetary tradeoffs: irrational types, on average, squander 260 percent more money than rational types through inconsistencies in their monetary valuations. Despite the presence of noise, monetary valuations still reflect the underlying privacy preferences, as more private types require significantly more compensation for sharing personal data. Finally, the measures of privacy preferences elicited in the laboratory are correlated with a widely-used question eliciting self-reported privacy concerns and with behavioral outcomes in different domains of daily-life personal information sharing. We conclude that, while there is considerable heterogeneity in privacy attitudes, a non-trivial proportion of individuals demonstrate systematic consistency with rationality when making privacy choices.

Author(s): Yi-Shan Lee, Roberto Weber

Topic: Decision Theory: Preferences, Social Behavior: Other

Do adolescents' risk and time preferences change when they are observed by peers?

Agnieszka Tymula
University of Sydney
Decisions made during adolescence and young adulthood have economic impact on people throughout their lives. It is now clear that teens and young adults more often than midlife adults make decisions that impair their own educational, health, and social outcomes, and their financial outcomes in the form of foregone future salary and retirement. Reckless behaviors come at a substantial financial burden to the society that bears the costs of hospitalization, preventive policies, and educational campaigns. The decisions that adolescents and young adults face such as whether to smoke, whether to have unprotected sex, and how much time to devote to studying are an outcome of complex interactions of an array of individual decision-making parameters; these include attitudes towards known and unknown risks, time preference, and the relative valuation of equally sized gains and losses. Importantly, most decisions, particularly in adolescence, are made not privately but in a social context. The presence of peers is often considered as the culprit in reckless behaviors. We designed a series of behavioral studies to disentangle whether adolescents' and young adults' risk attitudes, ambiguity attitudes, time preference or loss aversion are affected by the presence of peers. To date, 600 participants aged 12-25 years old participated in these behavioral studies. Each participant made a series of incentive compatible choices over risky and ambiguous gambles and between options that involve sooner smaller or later larger payments using three reward types: money, healthy and unhealthy food. Participants made choices in private and when observed by a peer. Our results suggest that common belief that adolescents and young adults become more risk taking in the presence of peers may be wrong if we define risk attitudes as in economic theory. Instead, young adult's and adolescent's time preferences seem to be affected by observation.

Author(s): Agnieszka Tymula

Topic: Decision Theory: Preferences, Psychology and Biology: Gender and Individual Differences

Back to session: Preferences 2: Risk and Time

Temporal Stability of Risk Preferences: Maximum Simulated Likelihood Estimation of Cumulative Prospect Theory

Hongming Zhao
Durham University

ABSTRACT:

Individual risk attitudes are typically assumed to be temporally stable in decision models, but only a handful of empirical studies have formally tested this assumption in the context of Cumulative Prospect Theory. We evaluate the hypothesis of temporal stability using data from an incentivized choice experiment and a structural econometric model that captures unobserved heterogeneity in all components of a general preference functional under CPT: namely, sign-dependent utility functions, sign-dependent probability weighting functions and loss aversion. A unique feature of our model is that it specifies each preference parameter as a subject- and session-specific random coefficient, and allows for an unrestricted pattern of correlations across the random coefficients, both between experimental sessions and between different components of CPT. This allows us to develop rich insight into temporal stability, by formally testing stability in the population joint distribution of preference parameters, as well as a within-subject autocorrelation of each preference parameter. Our results suggest that assuming away between-session and between-component correlations as in the existing literature could have substantive effects on conclusions that one draws regarding temporal stability.

Author(s): Morten I Lau, Hong Il Yoo and Hongming Zhao

Topic: Decision Theory: Preferences, Decision Theory: Risk

Back to session: Preferences 2: Risk and Time

Cross modal discounting for risk and time

Rebecca McDonald
University of Birmingham
Everyday risky or intertemporal decisions are typically between options that differ in many ways, not just in the degree of risk or the delay until the outcomes are received. Yet most experimental investigations into risk and time preferences isolate that dimension as the only distinguishing feature of the options. We conduct experiments that vary whether choices are unidimensional (options vary only in their risk or delay) or crossmodal (options differ in risk or delay but also in what the outcomes actually are). We show that risk and delay play significantly smaller roles when choices are crossmodal. This suggests that usual lab experiments overestimate both risk aversion and time discounting. More profoundly, our results cannot be reconciled with any typical weighted-value models of risky and intertemporal choice (including EUT, Prospect Theory, DU models and Quasi hyperbolic discounting). Instead, choice must be attribute-based, with the weight on any dimension inversely related to the number of attributes along which the options differ.

Author(s): Rebecca McDonald, Daniel Read, Robin Cubitt
Topic: Decision Theory: Other, Decision Theory: Risk
Back to session: Preferences 2: Risk and Time

Intertemporal Consumption with Risk: A Revealed Preference Analysis

Bin Miao
National University of Singapore

ABSTRACT:

The canonical way of representing preferences over among risky consumption streams is to combine the expected utility and discounted utility models. The resulted discounted expected utility model is separable across both states and time, and has a strong implication: the coefficient of relative risk aversion is the reciprocal of the coefficient of intertemporal substitution. Partly because this relationship has been repeatedly confounded by data, alternative models have been proposed by dispensing with either separability across states or separability across time. In this paper, we report a new experiment to elicit preferences of subjects over risky consumption streams, and derive revealed preference methods to test alternative hypotheses. Our results broadly support the separation of preferences across states but not across time. Furthermore, the data are consistent with the same sub-utility functions in the two states with positive time preference over intertemporal consumption.

Author(s): Joshua Lanier, Bin Miao, John Quah, Songfa Zhong
Topic: Decision Theory: Preferences, Decision Theory: Risk
Back to session: Preferences 2: Risk and Time

Verifying the representativeness heuristic: a field experiment with real lottery tickets

Joanna Rachubik
University of Warsaw

ABSTRACT:

Despite having the same probability of being drawn, certain number combinations are more popular than others among the lottery players. One explanation of such a preference is the representativeness heuristic (RH). Unlike previous hypothetical experiments, in the present experiment we used actual lottery tickets, involving a high payout in case of winning to elicit true preferences. To verify if people prefer randomly-looking number combinations, participants were to choose a preferred ticket. To validate if it is likely to be caused by RH, we correlated preference for 'random' sequences with the belief in dependence between subsequent coin tosses. We confirm that people strongly prefer random sequences and that a non-trivial fraction believes in dependence between coin tosses. However, there is no correlation between these two tendencies, questioning the RH explanation. By contrast, participants who have an (irrationally) strong preference for number combinations also tend to make (irrationally) specific predictions in the coin task.
Unexpectedly, we find that females are considerably more likely to belong to this group than males.

**Author(s):** Michal Wiktor Krawczyk, Joanna Rachubik  
**Topic:** Decision Theory: Preferences, Field Experiments: General  
**Link:** [https://www.wne.uw.edu.pl/files/8415/1678/8608/WNE_WP262.pdf](https://www.wne.uw.edu.pl/files/8415/1678/8608/WNE_WP262.pdf)  
**Back to session:** Preferences 3

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**Estimating the Effects of Present Bias and Reference Dependence: A Calibration Model of Energy Consumption**

**Madeline Werthschulte**  
**University of Munster**

**ABSTRACT:**

This paper analyses the influence of present biased and reference dependent preferences on energy consumption in a calibration model of individual choice behavior. The energy billing structure is considered as dynamic due to lagged billing compared to immediate consumption. The consequence is an overconsumption of energy, both from households' ex ante perspective and a social perspective, given that households' energy consumption makes up a large chunk of greenhouse-gas emissions. In an artefactual field experiment with 700 subjects, who are chosen to be representative for the German population, preference parameters are elicited. Counterfactual simulations demonstrate the extent of present bias influencing revealed energy consumption. In a second step, reference dependent preferences, comparing stochastic energy costs to reference energy costs, are introduced. Policy-induced shifts in the reference point are simulated to assess whether these shifts alleviate the dynamic inconsistency problem.

**Author(s):** Madeline Werthschulte, Andreas Loeschel  
**Topic:** Decision Theory: Preferences, Applied Economics: Other  
**Back to session:** Preferences 3

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**Choice Correspondence and the Completeness Axiom: a Methodology and an Experiment**

**Elias Bouacida**  
**Paris School of Economics, University Paris 1 Pantheon Sorbonne**

**ABSTRACT:**

The completeness of preferences is a widespread assumption in economics, despite its lack of normative appeal or empirical validation. A key in order to empirically study it is to elicit a choice correspondence, i.e., the possibility to choose several alternatives rather than a single alternative from a set. We build a methodology in order to elicit choice correspondences and give the conditions under which this elicitation properly reflects decision makers' preferences. We apply this methodology in an experiment. We find that 98.04% of the subjects chose more than one alternative at least once, and that only 42.04% of observed choices are singletons, which points to the relevance of studying the possibility of choosing non singleton sets. We find that 42.16% of elicited choice correspondences verify the weak axiom of revealed preferences, which implies that they verify the completeness assumption. We then proceed to assess Eliaz and Ok (2006)'s construction that assumes a notion of regularity on top of transitivity and show that it explains only 2.68% of our data. We then investigate various weakenings of their construction, to assess which assumption fails, transitivity, regularity or completeness on our data. Transitivity is verified by 93.14% of subjects when restricting our data to binary choices, which points toward a failure of regularity rather than transitivity.

**Author(s):** Elias Bouacida  
**Topic:** Decision Theory: Preferences, Methodology: Experimental Design, Tools and Practices  
**Link:** [https://www.parisschoolofeconomics.eu/docs/bouacida-elias/payforcertainty_january.pdf](https://www.parisschoolofeconomics.eu/docs/bouacida-elias/payforcertainty_january.pdf)  
**Back to session:** Preferences 3
The effect of cognitive load on time perception and time preferences

Hjóerdis Hardardottir
Lund University

ABSTRACT:

This paper studies whether cognitive load affects time preferences through the channel of time perception. Experimental studies on the effect cognitive load has on time preferences has shown mixed results. According to dual system theory being under cognitive load while making decisions reduces the efficiency of the logical but slow system 2 in the brain, leading to a poorer system 2 decisions and more frequent use of the impulsive and fast system 1. This should lead to more impatient decisions, both because imagining the far future requires more cognitive power than imagining periods of time closer to the present and because decisions governed by system 1 are more present biased. However, digging deeper into the mechanisms coupled to cognitive load in the psychology literature, it has been shown that being under cognitive load is related to the shrinking of subjective time related to objective time resulting in more patience in objective terms, assuming that time preferences over subjective time are fix. Hence, the effect of altered time perception under cognitive load goes in the opposite direction to the dual system theory effect, which might explain the mixed result in the experimental literature on the subject. This study tests whether the effect of cognitive load on time preferences goes via the two proposed mechanisms. We conduct an experimental study where (i) the prospective time perception (ii) cognitive performance and (iii) time preferences are tested, all under varying degree of cognitive load induced by Stroop tasks. Our hypothesis is that increasing cognitive load decreases the ratio of subjective time to objective time, impairs performance on the cognitive performance task and that the sum of these two effects determines the total effect of cognitive load on time preferences. In order to ensure identification and strengthen the temporal link between prospective time perception over a very short period of time and time preferences measured over a long period of time we perform a second experiment where changes in cognitive performance, time perception, time preferences as well as in future perspective (estimated by a scrambled word task) are induced with varying degree of arousal induced by external tempo.

Author(s): Hjóerdis Hardardottir
Topic: Decision Theory: Preferences, Psychology and Biology: Cognition

Reciprocity in the workplace: Communication and contracts in a multitasking setup

Manuel Munoz
New York University Abu Dhabi

ABSTRACT:

This paper reports on a multitask gift-exchange experiment in which task A is observable and task B is non-observable nor contractible. We study how enforcing agreements for task A and allowing for few or multiple rounds of communication, affect reciprocity and efficiency. Our results show that when there is no communication, contracts enforce compliance in the observable task beyond what is achieved on a trust-based setting. When communication is present but infrequent, binding agreements guarantee high efforts in task A but result in very low efforts (although positive) in task B. In the opposite direction, cheap talk agreements guarantee more reciprocity in task B but lower efforts in task A. When communication is frequent, reciprocity is boosted when agreements are binding but does not change when they are cheap talk. Thus, indicating that communication and contracts have stronger complementarities than communication and trust.

Author(s): Manu Munoz-Herrera; Ernesto Reuben
We Can Be Heroes Trust and Resilience in Corrupted Economic Environments

Leonardo Becchetti
University of Rome Tor Vergata

ABSTRACT:

We use an original variant of the standard trust game, in order to study the effect of corruption on trust and trustworthiness. In this game, both the trustor and the trustee know that part of the surplus they can generate may be captured by a third 'corrupted' player under different expected costs of audit and prosecution. We find slightly higher trustor's giving in presence of corruption, matched by a significant effect of excess reciprocity from the trustee. Both the trustor and the trustee expect on average corruption acting as a tax, inelastic to changes in the risk of corruptor audit. Expectations are correct for the inelasticity assumption, and for the actual value of the 'corruption tax'. Our experimental findings lead to the rejection of four standard hypotheses based on purely self-regarding preferences. We discuss how the apparently paradoxical excess reciprocity effect is consistent with the cultural role of heroes in history where examples of commendable giving were used to stimulate emulation of the ordinary people. Our results suggest that the excess reciprocity component of the trustee makes trustor's excess giving a rational and effective strategy.

Author(s): Leonardo Becchetti, Luca Corazzini, Vittorio Pelligra

Topic: Games: Other, Social Behavior: Other-regarding Preferences

Link: https://www.cefims.ac.uk/cgi-bin/research.cgi?id=143

The power of words in a petty corruption experiment

Chiara Nardi
Dept. of Economics, University of Verona

ABSTRACT:

Using a simple bribery game, the paper wants to study whether non-monetary costs associated with corrupt behavior can be exploited to successfully reduce corruption. More specifically, we aim at investigating the potential contribution of informal non-monetary sanctions in the form of communication opportunities granted to those who suffer from corruption to the mitigation of petty collusive corrupt behavior. We focus on 'petty' rather than 'grand' corruption where bribers (often ordinary citizens) and bribees (usually underpaid junior or mid-level officials) are more likely to feel shame and guilt towards those who are negatively affected by their corrupt behavior. Moreover, we assess whether the bribers' and bribees' moral costs depend on the knowledge of the 'exact' harm caused to society by the corrupt transaction.

Author(s): Maria Vittoria Levati, Chiara Nardi

Topic: Social Behavior: Communication, Social Behavior: Norms and Morals

Watch your Words: an Experimental Study on Communication and the Opportunity Cost of Delegation

Filippo Pavesi
University of Verona
ABSTRACT:
We consider a principal-agent relationship, and study the interplay between communication and the opportunity cost of delegation in influencing the principal's choice to delegate and the agent's propensity to prove worthy of trust. In order to this, we adopt a lost-wallet game in which the agent that wishes to be trusted can send a free-form message to his counterpart in the initial stage of the game. We find that communication is effective since it attenuates the effect of the opportunity cost of delegation on the principal's choice. In particular, when the opportunity cost of delegation is high, communication increases beliefs on the amount that the agent will return in case of delegation. Moreover, we find that non-precise statements of intent are more frequent in the presence of lower opportunity costs of delegation, in which case we document an illusion effect: the agent incorrectly expects non-precise communication to exert positive effects on principal's beliefs and her propensity to delegate.

Author(s): Armenak ANTINYAN, Luca CORAZZINI, Elena D'AGOSTINO, Filippo PAVESI
Topic: Social Behavior: Communication, Games: Information
Link: https://ideas.repec.org/p/ver/wpaper/18-2017.html
Back to session: Promises, Reciprocity, and Corruption

Emotional expressions by sports teams: an analysis of world cup soccer player portraits

Astrid Hopfensitz
Toulouse School of Economics

ABSTRACT:
Emotion display serves as incentives or deterrents for others' in many social interactions. We study the portrayal of anger and happiness, two emotions associated with dominance, and its relationship to team performance in a high stake environment. We analyze 4,318 pictures of players from 304 participating teams in twelve editions (1970-2014) of the FIFA Soccer World Cup, and use automated face-reading (FaceReader 6) to evaluate the display of anger and happiness. We observe that the display of both anger and happiness is positively correlated with team performance in the World Cup. Teams whose players display more anger, an emotion associated with competitiveness, concede fewer goals. Teams whose players display more happiness, an emotion associated with confidence, score more goals. We show that this result is driven by less than half the players in a team and mainly due to emotion display by defensive players.

Author(s): Astrid Hopfensitz and Cesar Mantilla
Topic: Psychology and Biology: Emotions, Social Behavior: Other
Back to session: Psychology and Biology (SHORT)

When Palm Reading Fails To Correlate With Economic Behavior

Natalia Candelo Londono
CUNY Queens College

ABSTRACT:
Several studies have found correlations between prenatal testosterone exposure measured with the 2D:4D ratio, pro-social behavior, risk and patient attitudes, and self-employment. This line of research suggests that the latter four variables might have an effect on individual financial performance. Individuals prenatally exposed to higher levels of testosterone have lower levels of risk aversion, higher levels of patience and invest more in others, and in themselves, therefore have higher individual financial profits. We test these hypotheses with a sample of 115 African-Americans who live in a low-income urban area in the U.S. Our results do not support previous research. The 2D:4D ratio in our sample of males and females does not have a consistent and robust correlation with risk, patient attitudes, pro-social behavior and self-employment.
Perceptual overconfidence and suboptimal use of symbolic cues: A theoretical and empirical analysis

Marine Hainguerlot
Universite Paris 1 Pantheon-Sorbonne

ABSTRACT:

Whereas our perceptual systems appear able to combine sensory cues optimally, humans are often suboptimal when they have to integrate non-sensory information: observers typically exhibit a conservatism bias by which they under-react to cues that are informative and relevant for the task. We describe here a computational model in which this conservatism is due to the observers' overconfidence in their sensory abilities. Within this model, we derive theoretical measures of perceptual overconfidence, conservatism, and the associated suboptimal performance in a task that requires combining sensory and non-sensory cues. We tested this model in a psychophysical experiment on a large group of participants (N=69), in which we measured in separate sessions the perceptual overconfidence of observers and their performance during a cue combination task. Critically, our data reveals that perceptual overconfidence and conservatism in the presence of cues were both present, but that they were uncorrelated across participants, calling for a reassessment of the candidate model. Further analyses indicated that participants' overconfidence correlated with a decrease in decision sensitivity when decision cues were offered, which mediated the relation between overconfidence and suboptimal performance in the task. Our findings offer new perspectives on how human observers combine sensory and non-sensory information towards decision-making.

Author(s): Marine Hainguerlot, Thibault Gajdos, Jean-Christophe Vergnaud, Vincent de Gardelle
Topic: Psychology and Biology: Cognition, Decision Theory: Bounded Rationality
Back to session: Psychology and Biology (SHORT)

Testing the Informational Robustness of a Public Good Mechanism

Svenja Hippel
MPI Collective Goods, Bonn

ABSTRACT:

The mechanism design and implementation literature has found powerful theoretical solutions to achieve the collective interest even when players hold private information. But many mechanisms are not robust enough for an applied use. Often, they are based on the assumption of a common prior distribution. Or they induce games with multiple equilibria, some of them producing undesired outcomes. Bergemann and Morris (2005) develop criteria for when informational robustness can be achieved and a mechanism is robust to different levels of knowledge a player has about the other player's private information. This paper presents an explicit laboratory test of this informational robustness using a generalized Vickrey-Clarke-Groves mechanism in a public good setting. The experiment varies whether the mechanism is played out interim or ex post - before or after the players get to know the counterpart's payoff type - which mirrors the theoretical equivalence demanded. Additionally, the level of interdependence of valuations is varied, partly inducing games with multiple equilibria - which all deliver the same efficient outcome. The mechanism is therefore also theoretically robust in this second dimension. Empirical results show that the mechanism used is indeed informationally robust and that there are no significant efficiency reductions in the case of multiple equilibria. Heterogeneous valuations for the public good pose a serious challenge to incentive compatibility: Truth-telling rates drop by half for individuals with a low valuation.
Social Comparisons in the Public Goods Game

Levent Neyse
Universidad de Granada

ABSTRACT:
Cumulative evidence in social psychology has shown that social comparisons have strong influences on human behavior and cognition. In this study, we investigate the impact of social comparisons on contribution decisions in a public goods game. Our design consists of four homogeneously formed groups which differ from each other with respect to their marginal per capita return (mpcr) levels. In the control treatments, groups were only aware of their own mpcrs where in experimental treatments high (low) mpcr groups were informed about the existence of low (high) mpcr groups. In line with the typical findings in the literature, contributions increase with the mpcr both with and without information. The results on social comparisons show that when groups with the lowest mpcr were informed about the existence of groups with the highest mpcr, they decrease their contributions dramatically. Our findings points out that upward social comparisons have a significant impact on contribution decisions when the reference group has a much higher return level.

Inducing cooperation: who is affected?

Manja Gaertner
DIW Berlin

ABSTRACT:
Cooperation is essential for the provision of public goods. Campaigns by government institutions and non-profit organizations frequently aim to affect contributions to public goods by appealing to reason or emotions. Appeals to reason typically describe the benefits of cooperation, while appeals to emotion illustrate compassion towards others. However, little is known about who is affected by such interventions and whether they treat specific groups of society. This paper investigates this question. We conducted an incentivized experiment that was sent to a representative sample of the Swedish population (N = 1,832). The experiment elicits the individual willingness to cooperate in a series of prisoner's dilemma games as well as a four-player public goods game. In a between-subject design we varied whether subjects are instructed to rely on their intuitive-emotional decision making processes or their analytical-rational decision making processes when choosing whether to cooperate, based on a recent experimental intervention by Levine et al. (2017). In a questionnaire we elicited a set of individual socio-economic characteristics, political preferences, individual preferences to rely on intuitive and deliberate decision styles, and contributions to real-world public goods. The analysis of the data is ongoing. Preliminary results show that we replicate the findings of Levine et al. (2017): Appeals to intuitive-emotional decision making, rather than rational-analytical decision making, significantly increase cooperation rates in the prisoner's dilemma game. However, this result does not extend to the public goods game. Based on recent findings on the heterogeneity in the acceptance of nudges (Hagman et al. 2015, Jung and Mellers 2016), the analysis of heterogeneity in the treatment effect will have a focus on political preferences. Based on a recent literature on whether subjects understand experimental cooperation games (Burton-Chellew et al. 2016), we will also draw special attention to who fails to prove understanding of the games in our study.
Psychological depreciation and food waste

Fanny Brun
University of Zurich

ABSTRACT:

Around one third of the food produced worldwide is lost or wasted every year (Food and Agriculture Organization of the United Nations (hereafter FAO), 2011). Not only is food waste harmful to the environment — it is responsible for one third of all greenhouse gas emissions (Garnett, 2011) and is highly resource-intensive (FAO, 2013; Godfray et al., 2010; Natural Resources Defense Council (hereafter NRDC), 2012) — but is also costly from the households' perspective: the annual loss is estimated between $1,350 and $2,275 for a typical American four-person household (NRDC, 2012). The loss of edible food takes mostly place at the household level (from 52% for Europe to 61% for North America and Oceania, in percent of kcal wasted, Lipinski et al., 2013). While there are many causes of food waste, explicit freshness informational cues — such as date labels — seem to play an important role (Swiss Federal Office of the Environment, 2012; Waste and Resources Action Program in the UK, 2015). Typically, people's preferences overly rely on the production dates. In an experimental study, people were significantly more willing to consume new 'stored for two months' rather than old 'stored for 8 months' apples. However, they became indifferent between old and new apples after having tasted them as they noticed that the expected gustatory difference was actually inexistent (Lund et al., 2005). Optimally, people should therefore not exclusively rely on freshness information when deciding whether to discard or eat a food item, but also on a sensory evaluation of them. We run an experiment to learn about people's attitude towards freshness informational indications in order to better understand the role that these play in food waste and to potentially alleviate the problem itself. Contrary to most research, we focus our attention on people's perception of food freshness with respect to how long an item has been stored rather than to its expiration date. In our study, we measure people's expected and experienced utility of consuming a food item in a controlled and real-choice situation, where provision of information on the production date is varied across treatments. We test if people's expectations of food depreciation over time corresponds to the actual (experienced) food depreciation. This is relevant in the view of food waste: if expectations are wrongly low, people may behave inefficiently by not even trying an old food item before throwing it away. In addition, we investigate whether disclosing the production date affects people's experienced utility of consumption via the direct effect this information has on expectations. Research indeed shows that expectations can have a causal effect on hedonic experiences. We are therefore interested in testing whether the negative expectations generated by the disclosure of long storage duration induces a worse taste, phenomenon that we call psychological depreciation and that may lead people to make suboptimal decisions and produce avoidable waste. The data collection will start in February.

Author(s): Fanny Brun, Roberto Weber

The Effects of Short-Term Food-and-Water Deprivation on Cooperation

Holger Gerhardt
University of Bonn

ABSTRACT:

Objective: The availability of food and water varies substantially across regions and social environments. Hunger and thirst are common experiences in developing countries. They are less pronounced in developed countries but still
fluctuate over the course of a day. This may affect decision making in ways that have not yet been explored. In particular, feedback loops might exist such that food and water deprivation lead to a lower willingness to cooperate for obtaining, e.g., a food reward, thereby reinforcing the deprivation and leading to a vicious circle. In this study, we test the hypotheses that hunger and thirst reduce the willingness to cooperate for obtaining a food reward and for obtaining monetary rewards. Methodology: We conducted a laboratory experiment that lasted around 9 hours and in which we induced a mild food-and-water deprivation over the time span of several hours. All sessions started at 9:00. Subjects of the treatment group (n = 100) were deprived of both food and water until around 16:45, while subjects in the control group (n = 100) received lunch, including a beverage. To obtain objective measures of the treatment effect, we repeatedly recorded subjects' blood glucose levels. We also asked subjects about their sensations of hunger and thirst and other indicators of discomfort. In the early afternoon, when the expected metabolic states of the two groups were most divergent, subjects made decisions in three prisoner's dilemmas. The first was a prisoner's dilemma over pizza slices (PD-P); the second was a prisoner's dilemma over money (PD-M); and the third was a prisoner's dilemma over money that used the strategy method and included a subsequent first-party punishment stage (PD-M-Pun). We also applied additional tests regarding the effect of deprivation on, e.g., risk taking, altruism, and cognitive performance. Results: Deprived subjects had significantly lower blood glucose levels and reported greater hunger and thirst than nondeprived subjects (all p < .001, t-tests). Contrary to our hypothesis, cooperation rates in the prisoner's dilemma over pizza did not differ significantly between the treatment and the control group (76% vs. 80%, p = .6090, Fisher's exact test). By contrast, the cooperation rates in the two prisoner's dilemmas over money were lower for deprived subjects than for nondeprived subjects (40% vs. 53%, p = .0890, in PD-M; and 45% vs. 71%, p = .0002, for the unconditional decision in PD-M-Pun). At the same time, the cooperation rate measured in PD-M-Pun via the decision conditional on the partner cooperating was not lower in the deprived than in the nondeprived group (it was slightly higher: 79% vs. 71%, p = .24). Conclusion: We find that several hours of food and water deprivation had a sizable effect on subjects' physiological and self-reported state. We also observe that food-and-water deprivation significantly reduced subjects' willingness to cooperate in two prisoner's dilemmas over money. Interestingly, this effect was absent in the prisoner's dilemma with a food reward. This suggests that scarcity affects the willingness to cooperate with others, but may exclude the domain in which the scarcity is experienced. Moreover, short-term deprivation seems to affect subjects' willingness to cooperate negatively rather by making them more pessimistic about others' intentions than by actually changing their other-regarding motives.

**Author(s):** Holger Gerhardt, Markus Antony, Armin Falk  
**Back to session:** Psychology and Biology (SHORT)

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**Improvements in Sanitary Products for Menstruation and Female Outcomes**

**Alessandra Cassar**  
**University of San Francisco**

**ABSTRACT:**

This paper reports the results of a field experiment in rural Nepal designed to measure the effects of improvements in sanitary products for menstruation on female outcomes, looking at both objective and subjective measures of female wellbeing and empowerment. Media articles of menstruation as impediment to school attendance, after school activities and everyday undertakings are widespread. At the same time scientific research has provided mixed results, with a majority of studies based on girls and teachers' self-reports finding ample evidence of negative impacts while others, based on objective measures of absenteeism and grades, failing to confirm effects of that magnitude. In our field experiment, we provided reusable menstrual pads and/or health seminars to 312 schoolgirls and 100 of their mothers in a 2\*2 design. Initial results show that provision of just the reusable pads caused absenteeism to decline by half a day per month on average, while the provision of both pads and health seminars reduced absenteeism by approximately one day (25% reduction). Health seminars, while not effective on absenteeism, displayed a positive and significant impact on psychological wellbeing.

**Author(s):** Alessandra Cassar & Anjali Limbu  
**Topic:** Applied Economics: Economic Development, Field Experiments: General
The performance of q-majority rules with logrolling: theoretical and experimental evidence

Liza Charroin
GATE LSE

ABSTRACT:
We investigate the performance of alternative q-majority rules in a context where individuals can engage in vote trading (or logrolling) agreements. In our model, a group is confronted with a set of potential 'projects', each of which would yield heterogeneous (positive or negative) payoffs if undertaken. The members of the group can vote on 'proposals' to undertake such projects. Without vote trading, only proposals consisting of a single project may be considered. Vote trading allows two or more projects to be bundled into a single proposal - implicitly reflecting a vote trading 'deal' between the members of a majority coalition. We use simulations to investigate the set of such deals that can be struck under different decision rules. We show that the performance of alternative rules depends upon the 'complexity' that logrolling agreements can exhibit, e.g. on the number of projects that can be bundled and the number of individuals that can be involved in the implicit 'trade' that is being performed. We conduct laboratory experiments to investigate which log-rolling agreements human subjects actually engage in and in which conditions each decision rule is optimal.

Author(s): Liza Charroin and Christoph Vanberg
Topic: Public Choice: Voting and Rent Seeking, N/A

When Collective Ignorance Is Bliss: Theory and Experiment on Voting for Learning

Boris Ginzburg
Universidad Carlos III de Madrid

ABSTRACT:
When will groups and societies collectively choose to be uninformed? We model the problem of a committee that needs to vote on a reform. If adopted, the reform will give every member a private payoff which depends on a state of the world. Individual payoffs in each state are commonly known, but the state is initially unknown. Members cannot learn the state individually. However, prior to voting on the reform, the committee can vote to acquire public information about the state, at no cost. We find that a committee will vote against learning the state if and only if the difference in size between independent voters is smaller than the difference in size between partisans. This result holds for a committee of any size, for all distributions of individual payoffs, and for any prior belief about the state. This suggests that groups and societies with this pattern of heterogeneity are likely to make decisions in haste, to have less deliberation, and to exhibit less support for institutions that make them more informed. We test the main theoretical result in a laboratory setting. In line with theoretical predictions, we find that committees are substantially less likely to acquire information when independents are more fractionalised than partisans. Furthermore, individuals with more experience in decision-making, and those with greater strategic competence, are more likely to vote in line with theory, providing evidence for external validity of the model.

Author(s): Boris Ginzburg and Jose-Alberto Guerra
Topic: Public Choice: Voting and Rent Seeking, Games: Information
Link: https://docs.google.com/viewer?a=v&pid=sites&srcid=ZGVmYXVsdGRvbWFpbnxib3JnaW58Z3g6MjAzMmQwNmE2OGQzMWNkMw
Sanctioning, Selection and Pivotality - Theory and Experimental Results

Raisa Sherif
Max Planck Institute for Tax Law and Public Finance, Munich

ABSTRACT:

We study the role of pivotality beliefs in majoritarian voting for an incumbent's accountability choice and voters' selection and sanctioning incentives in theory and in a laboratory experiment. Pivotality considerations may support equilibria with accountability and equilibria that cultivate favored majorities. Experimental voting behavior is broadly in line with a theory suggesting that selecting the better candidate matters for voting choices, but retrospective voting behavior is also present and is only slightly less pronounced if there is a selection incentive. Pivotality beliefs matter. They are partially shaped by whether incumbent politicians treat all voters alike, or cultivate a favored majority. In this latter case, minority voters think they are less likely to be pivotal than the majority voters. Also the minority voters are less likely to be in line with existing selection incentives of voting for the incumbent in case the incumbent has an incumbency advantage. We also confirm that the behavior of incumbents reflect the observed voting behaviour.

Author(s): Kai A. Konrad and Raisa Sherif
Topic: Public Choice: Voting and Rent Seeking, Public Choice: Other
Back to session: Public Choice: Theory and Experiments

Risk-taking under Different Welfare-state Regimes: Some Experimental Evidence

Meike Benker
Helmut-Schmidt-Universitaet

ABSTRACT:

In this paper we investigate risk-taking under different welfare-state regimes. We provide a simple model of the welfare state where individuals have to meet a minimum income in order to enable social participation. We analyze optimum investment behavior under different need-based redistribution schemes. The model is tested in a laboratory experiment where subjects have to decide from under a veil of ignorance on how much of their initial endowments they want to invest into a risky and productive asset. We show that need-based redistribution generally decreases inequality and increases efficiency by stimulating higher investments. Means-tested need-based redistribution is most efficient but leads to more inequality than lump-sum transfer.

Author(s): Meike Benker, Jan Philipp Krugel, Stefan Traub
Topic: Public Choice: Other, Decision Theory: Risk
Back to session: Public Choice: Theory and Experiments

Goal setting and team performance

Jan Philipp Wilhelm
RWTH Aachen

ABSTRACT:

One of the possible caveats of team incentives is the opportunity to shirk and free-ride on the expense of the teammates. Setting performance goals may be a viable way to induce higher performance, thus mitigating the cooperation problem in team settings. Using a modified public good game with three agents and a principal whose earnings depend on the agents' contributions, we explore whether the effectiveness of goal setting is contingent on who is setting the goal. We
compare situations where the team endogenously sets a binding target to situations where the principal, not being part of the group, sets the performance target. In addition, we test two different binding goals, i.e. 65% or 95% of the maximum contribution. When the performance goal is not met, contributions are lost to the agents. After the first round, we apply a complete stranger matching to reform new groups. In the endogenous selection treatment, a majority vote is used to determine whether a goal is set or not. The public good is played using the strategy method, i.e. each subject states her contribution with the goal set and without goal setting. Preliminary results suggest that goal setting in groups outperforms hierarchical goal setting at least for the higher performance goal.

Author(s): Scheuermann, Martin & Wilhelm, Jan
Back to session: Public Goods (SHORT)

Delegation and Obligation in Multiple Public Goods

Tomaso Reggiani
Masaryk University

ABSTRACT:

We present results from a laboratory experiment in which we study the effect of delegation in a multiple public goods context. We devised treatments combining three factors: (i) the option to delegate the allocation of the individual contributions to a delegated member of the group vs. standard non-delegation; (ii) the obligation of the delegated member to contribute at least the amount she received from the group's members vs. non-obligation; (iii) multiple vs. single public good. We find that delegation helps to solve the issue of coordination on a public good project only if it involves obligation of the delegated member to contribute at least the amount conferred to her by the other members. As expected, delegation emerges and improves the outcomes only when there are multiple public goods. In a single public good context, obligation does not add anything in terms of contribution and efficiency. Keywords: multiple public good game, delegation, obligation.

Author(s): Luca Corazzini; Christopher Cotton; Tommaso Reggiani
Back to session: Public Goods (SHORT)

Can you get too much of a good thing? : The influence of pro-social incentives on labor supply

Rainer Michael Rilke
WHU - Otto Beisheim School of Management

ABSTRACT:

We investigate the influence of pro-social incentives on workers' labor supply in a natural field experiment. We recruited workers to take part in a survey for a fixed compensation. Having finished the survey, a bonus payment is offered in order to perform an additional optional task. In different treatments, the bonus payment generates (i) a standard private gain, (ii) an equivalent donation or (iii) different combinations of private gain and donation. We observe that high donations in combination with no or only small individual gains lead to negative or null effects on labor supply. Bonus combinations of small donations and generous private gains increase labor supply. Effort provision, as well as job satisfaction, are not systematically affected by the different incentive schemes. The experiment sheds lights on widely accepted claims that corporate philanthropy measures are effective tools to motivate employees. When firms consider the design of pro-social incentives schemes, they should be vigilant about employees' distributional concerns.

Author(s): Tommaso Reggiani and Rainer Michael Rilke
Back to session: Public Goods (SHORT)
The Team Allocator Game: Allocation Power in Public Goods Games

Alexandros Karakostas
Newcastle University

ABSTRACT:
We analyze a modified linear, weakest-link and best-shot public goods game in which a distinguished team member, the team allocator, has property rights over the benefits from the public good and can distribute them among team members. These linear, weakest-link and best-shot team allocator games are intended to capture natural asymmetries in hierarchical teams facing social dilemmas such as which take place in work teams. Surprisingly, experimental results show that the introduction of a team allocator leads to pronounced cooperation in both linear and best-shot public-good games while it has no effect in the weakest-link public good. The team allocator uses her allocation power to distribute benefits from the public good in a way that motivates people to contribute. As a result, team profits are higher in the linear team allocator game but not in the best-shot, where lack of coordination lead to welfare decreasing behavior for the team members. Remarkably, the institution bears no direct monetary costs.

Author(s): Karakostas Alexandros, Kocher Martin, Matzat Dominik, Rau Holger, Riewe Gerhard

Investigating the effects of Information asymmetry and Competition in a modified threshold public goods game. An Experiment

Lawrence Choo
University of Erlangen-Nuremberg

ABSTRACT:
The provision of public goods in the modern economy often requires close collaborations between the government (e.g., building the infrastructure) and individuals. Often this will lead to individuals competing for limited public resources to be diverted towards their preferred public project. In such cases, individuals' contribution decision will depend on the availability of public resources and their belief about the policy-maker's preferred public project. This study investigates the effect that asymmetric information about the policy-maker's preferences and resource levels on the efficiency of contributions towards competing public goods. The experimental design involves two groups, each engaged in a separate threshold public goods game and a proposer, whose task is to distribute a fixed amount of resources between the two groups. The proposer's allocation to each group reduces its provision threshold, but at the opportunity cost of funding foregone to the other group. The paper further considers the effects of varied resource levels and policy-maker preferences on the contributory behaviour of the different groups. The experimental treatments differ on individuals' knowledge about the proposer's preferences and the fixed amount of funds.

Author(s): Lawrence Choo and Sara Le-Roux

Conditional cooperation and the effect of punishment

Wladislaw Mill
ABSTRACT:

Conditional cooperation and punishment are two important topics in social interaction. Here we study how punishment interacts with conditional cooperation. We find that punishment increases conditional cooperation. However, we also find a negative effect of punishment: Punishment leads to an increase in the number of free riders. In our study the net effect still is positive. We find two more effects of punishment: Substitution and responsibility. Substitution leads to a decrease in conditional cooperation. Responsibility leads to an increase in conditional cooperation. We find that the overall effect of responsibility is larger.

Author(s): Oliver Kirchkamp & Wladislaw Mill


Behavioral spillovers, incentives and collective action: Evidence from experiments

Elisabeth Gsottbauer
University of Innsbruck

ABSTRACT:

This experimental study investigates the impact of economic incentives on collective action and how potential spillover effects on behavior not originally target by the incentive can influence their evaluation. This question is of particular importance as the use of economic incentives to promote social desirable behaviors and improve collective action is increasing. Examples include penalties for tax evasion or rebates for energy-efficiency improvements. This paper reports a laboratory experiment studying if negative incentives (in the form of a tax) and positive incentives (in the form of a subsidy) meant to promote cooperation in one group, are likely to lead to unintended outcomes in another group facing a collective action problem. For this, we make use of an innovative experimental game where all participants are member of two groups and in both they are able to make separate contribution decision to a public good (e.g. dual-membership
design as used by Falk et al. 2004). We employ a set of treatments to test for the direct and indirect (i.e. spill-over) effects of positive and negative incentives meant to encourage cooperation. The main treatment variation explores whether direct and indirect effects depend on policy characteristics comparing a tax on non-contributions to a subsidy on contributions. One way to think about this is as a Pigouvian tax or subsidy which is commonly used to correct for negative externalities. Finally, we explore if distributional preferences, measured in a separate task, interact with provided incentives and are able to account for direct and indirect spillover effects.

Author(s): Elisabeth Gsottbauer; Estelle Midler; Stefanie Engel

Public Goods Bargaining under Mandatory and Discretionary Rules: Experimental Evidence

SunTak Kim
National Taiwan University

ABSTRACT:

We compare public good bargaining under mandatory and discretionary spending rules. In each period two parties bargain over how to divide a dollar between public and private accounts. The two parties attach different valuations to public good, either high or low, and proposer is selected according to Markov probability such that the proposer in previous round again becomes a proposer in current round with a fixed probability, regardless of history. In this environment, the discretionary rule implements (as status quo) zero in public account while the mandatory rule implements the level of public good that has been agreed upon in the previous round (or in the most recent round) upon a failure of agreement in the current round. The mandatory rule thus creates a relationship between current decisions and future payoffs, and our experiments test the consequential model prediction that the efficient level of public good is provided at steady states under the mandatory rule (while the level of public good remains at sub-optimal level under the discretionary rule). Our pilot study shows that (especially high-type) proposers tended to contribute to public account significantly more under the mandatory institution than under the discretionary one, and that the patterns of adjustments in public accounts, made by agreement to new proposals were largely consistent with the predicted patterns based on the realized status quos, set by previous agreements.

Author(s): SunTak Kim; John Duffy

Reverberation Effect of an Efficient Institution

Dmitri Bershadskyy
Leibniz Institute for Economic Research

ABSTRACT:

Using a public good laboratory experiment, the underlying paper analyzes the extent to which a newly established institution yields efficiency gains even after its removal. While it is widely accepted that institutions can overcome inefficient contribution behavior to public goods in laboratory settings (Chaudhuri 2011), in the real world, formation and continuity of institutions induce costs. Thus, in order to achieve social efficiency one must pursue the reduction of such expenses. This paper analyzes the capacity of an informal institution to shift individuals' expectations on joint cooperation permanently so that the institution becomes redundant and can be removed in order so decrease the costs. In the experimental setup a platform which allows for pre-play communication is considered as an institution. Potential increments in efficiency after the removal of the institution are referred to as the reverberation effect of an efficient institution. The research thereby contributes to the growing laboratory experiments literature on path dependence. This paper implements a multi-stage experiment with 384 participants, which focuses on two questions: (i) Do efficiency
The good, the bad and the conditional: Sustaining cooperation through self-sorting

Karen Hauge
Ragnar Frisch Centre for Economic Research

ABSTRACT:

Many environmental problems are associated with social dilemmas: while some group would collectively benefit from individual contributions to a public good, contributing is individually unprofitable. Previous research shows that while initial voluntary contributions can be substantial in such situations, cooperation typically crumbles over time unless cooperative individuals can interact mainly with each other. We present three public good game experiments demonstrating that if individuals can choose to be in a group pre-committed to charity, such groups sustain cooperation towards the local public good. Most subjects are conditional cooperators, whose preferences are similar between group types; however, a small minority of unconditional altruists overwhelmingly select charity groups, while free-riders largely select non-charity groups. Our results support the idea that socially responsible firms can attract responsible employees, who help sustain a cooperative firm culture.

Author(s): Kjell Arne Brekke, Karen Evelyn Hauge, Jo Thori Lind and Karine Nyborg

Civic Engagement as a Second-Order Public Good: An Experiment

Louis Putterman
Brown University

ABSTRACT:

Effective states solve the problem of financing provision of public goods by mandating contributions in the form of taxes and imposing penalties for non-compliance. However, a state that is answerable to its citizens is itself a public good requiring voluntary collective action in order to be sustained. We study the voluntary cooperative underpinnings of the formal sanction imposing state in a new laboratory experiment. We conduct a novel two-level laboratory public goods experiment in which successful cooperation in a social dilemma of civic engagement puts an effective sanction scheme in place to solve the main public goods dilemma. Our results suggest that the small cost of individuals' civic contributions relative to their benefits from an effective state help solve the dilemma problem, with local social interaction among participants providing a further boost.

Author(s): Kenju Kamei, Louis Putterman and Jean-Robert Tyran
Cooperation under heterogeneous preferences with voting

Sven Fischer
Newcastle University

ABSTRACT:
Existing research on the voluntary provision of public goods mostly ignores the question how the specification of the public good was determined and how this may affect the ability of the group to cooperate. In the natural world there are usually different possible specifications of the public good with varying implications for individual preferences for provision and overall welfare. We analyse experimentally how groups are able to cooperate if the specification of the public good is determined by the group itself via majority voting. Different specifications result in either symmetric or asymmetric preferences for the public good, and have varying implications on overall efficiency.

Author(s): Sven Fischer & Daniel J Zizzo
Back to session: Public Goods 1: Institutions

The Resilience of Cooperative Behaviour and Social Norms: Combining Real-World and Experimental Evidence

Martina Cecchini
Singapore-ETH Centre

ABSTRACT:
Contemporary economies face the increasing threat of natural and socio-economic shocks, such as extreme weather events, financial and migration crises. When these exogenous shocks occur, the tension between the interest of individuals and that of society as a whole is exacerbated. In fact, the need for individual cooperation and norm compliance increases, while incentives to do so may decrease. For example, a heat wave may result in widespread overconsumption of electricity and water, while an economic crisis may lead to reduced tax compliance and debt repayment. To investigate these issues, we combine the collection and analysis of real-word and experimental data. First, we study the effect of the haze 'a temporary condition of severe air pollution' on air-conditioning consumption in student residences of the National University of Singapore. In a second phase, we test our empirical results in a more controlled setting with a series of Public Goods laboratory experiments. To model the exogenous shock, we implement a within-subjects variation in the marginal per capita return from investment in the public good. Third-party punishment is also introduced to measure the effect of the shock on social norms and norm compliance. Our real-world data show that air-conditioning consumption significantly increases during the 2015 haze in Singapore. However, consumption reverts to its previous trend one week after the end of the event. These results are supported by our laboratory findings, which show that cooperation decreases significantly after the negative shock and quickly increases after the positive one. Although social norms are not affected by the shocks, their enforcement does not prevent the decrease in cooperation triggered by the negative shock. These results suggest that established social norms may be robust to short-lived exogenous shocks, but measures to increase the incentives to behave cooperatively are still essential during the crisis.

Author(s): M. Brulisauer, M. Cecchini, J. Schmitz, R. Schubert
Back to session: Public Goods 2

The effect of disclosing identities in a socially incentivized public good game

Britta Butz
RWTH Aachen

The effect of disclosing identities in a socially incentivized public good game
We investigate whether revealing identities in a public good game which includes a donation incentive lead to higher contributions to the public good. Previous evidence suggests that contributions to a public good rise significantly when taking place in public. Especially the amount of charitable giving seems to be sensitive to revealing identities. Reasons seem to be the fear of negative intersocial consequences and image concern as people like to be seen as good citizens. Using a laboratory experiment we examine a team incentive which consists of a twenty-percent donation share which is dependent on participants' contributions. In this setting, we explore whether informing participants about the fact that the group member's identities will be disclosed at the end of the experiment leads to higher contributions to the public good.

**Author(s):** Britta Butz, Christine Harbring  
**Topic:** Public Choice: Public Goods and Common Pool Resources, Social Behavior: Group Behavior

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**Conditional Cooperation: Review and Refinement**  
**Christian Thoeni**  
**University of Lausanne**  

**ABSTRACT:**  
Fischbacher et al. (Econ. Lett. 2001), henceforth FGF, introduced an experimental design to measure conditional cooperation in public goods games (PGG). We replicated FGF in a sample of 236 subjects under novel parameters and collected data from 14 replication studies. We refine FGF's definition of types to resolve ambiguous cases in FGF and its replication studies. Using our new classification scheme, we find in our combined data set with more than 3,500 individual observations that FGF's original findings are by-and-large stable: conditional cooperation is the predominant pattern; free-riding is frequent, while non-minimal, unconditional cooperation is very rare.

**Author(s):** Christian Thoeni, Stefan Volk  
**Topic:** Public Choice: Public Goods and Common Pool Resource, Methodology: Other

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**Rebate Policies in Large Group Threshold Public Goods Experiment: Belief, Information, and Repetition**  
**Yun Wang**  
**WISE, Xiamen University**  

**ABSTRACT:**  
This paper explores multi-round threshold public goods provision in large groups. We elicit subjects' beliefs regarding others' contributions and the project's cost; and we vary the amount of information between Round-0 and subsequent rounds to examine how the demand revelation changes with information, repetition, and cost. Our Round-0 decision-task replicates the large-group one-shot game of Rondeau et al. (1999) and Spencer et al. (2009), in which the project cost and group members' value distribution are unknown to subjects. In addition to the proportional rebate and three winner-take-all policies (Spencer et al., 2009), we introduce and compare two novel rebate rules: the uniform price cap (UPC) and the uniform price auction (UPA) mechanisms. Our Round-0 result shows that, in the one-shot unknown-cost setup, all rebate policies induce group contributions higher than the actual cost. Nonetheless, only UPC and UPA achieve almost 100% demand revelation, while the demand revelation under all other rebate policies is significantly below 100%. This result is different from Rondeau et al. (1999) and Spencer et al. (2009), which suggest 100% or more demand revelation for most rebate policies under the one-shot large-group design. Interestingly, subjects' perceived cost
Information defaults in repeated public good provision

Axel Sonntag
University of Vienna

ABSTRACT:

We present an experiment on information defaults and information seeking in a repeated public good provision setting. In our experiment the default is one either with or without information about others' contributions, and having information comes with a positive, zero or negative financial incentive. When information comes without a financial incentive or even is financially beneficial, subject choose to have the information, but around a third have the information even when this is costly. Moreover, a default of not having information about the others' contributions leads to a slower unraveling of cooperation, independent of the financial incentives of having information. This slower unraveling is explained by the beliefs about others' contributions in these treatments. A secondary informational default effect appears to take place. When the default is no information, subjects do not seek information more often but, conditional on considering financial incentives, they tend to believe that more other subjects seek information.

Author(s): Jia Liu, Axel Sonntag, Daniel John Zizzo
Back to session: Public Goods 3

Carbon is Forever: A Climate Change Experiment on Cooperation

Riccardo Ghidoni
Tilburg University

ABSTRACT:

Greenhouse gases generate impacts that can last longer than human civilization itself. Such persistence may affect the behavioral ability to cooperate. In a lab experiment, we study mitigation efforts under such dynamic externality within a framework that reflects key features of climate change. In treatments with persistence, pollution cumulates and generates damages over time, while in another treatment it has only immediate effects and then disappears. We show that with pollution persistence, cooperation is initially high but then systematically deteriorates with high stocks of pollution.

Author(s): Giacomo Calzolari, Marco Casari, Riccardo Ghidoni
Back to session: Public Goods 3

Nonetheless or all the more? Investing into climate change mitigation policies despite a risk of failure
In order to convince both policy makers and general public to engage in climate change mitigation activities, it is crucial to communicate the risk of climate change in an effective way. One aspect of climate change risk is the fact that, due to the amounts of greenhouse gases already present in the atmosphere, current mitigation activities cannot rule out the possibility of the climate reaching a tipping point completely but can only reduce it to some unavoidable residual risk level. The main objective of the experiment presented here is to get a detailed understanding of how the presence of such residual risk affects willingness to invest in climate change mitigation. Standard theories of individual decision making as well as common sense would suggest that situations with residual risks of negative events are less desirable than alternatives without such risks (Pratt 1992). Less obviously, unavoidable residual risk might lead to stress or a heightened state of alertness in the decision maker, such that the threat appears more immediate. Most studies show that humans under stress tend to focus on how things can go right instead of the negative outcome (Mather and Lighthall 2012). In contrast, Kandasamy et al. (2014) find that stress systematically changes perception of risks and that high levels of stress positively correlate with aversion to take risks. Furthermore, while most research on decision making only considers the individual (i.e., without interaction with others), climate change mitigation behaviour and its consequences affect and depend on humanity as a whole. It is thus not obvious how residual risk might change group dynamics where decision makers interact over an extended period of time. In a recent experiment, Farjam et al. (2017) demonstrated that residual risk in the context of climate change mitigation activities can actually help groups to cooperate. Their participants played a collective-risk social dilemma game (Milinski et al. 2008), where they could either keep their endowment for themselves or contribute part of it to the common pool. With the total contribution smaller than a predefined threshold, the group would be facing a priori risk of a large monetary loss, mimicking the consequences of climate change. The authors find that between treatments with the same a priori risk, the groups of subjects invested more and reached the threshold more often when there was residual risk (with the associated probability of 0.2) of the the loss occurring even in case the contributions were to reach the threshold. The first goal of our experiment is to replicate the results of Farjam et al. (2017) using a larger and more representative pool of participants. We are focusing on the treatments with a priori risk level of 0.9 and residual risk levels of 0.2 or 0.0, where the largest effect of residual risk was observed. While Farjam et al. considered those two levels of residual risk only, we are going to implement treatments with additional values of residual risk ranging from 0.0 to 0.4. Our central hypothesis is that there is a non-linear relationship between the level of residual risk and individual contributions to the common pool, i.e., residual risk should be large enough to be relevant to decision makers and yet not trivial an improvement over the status quo situation with a priori risk.

**Author(s):** Mike Farjam, Olexandr Nikolaychuk, Giangiacomo Bravo  

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**Does Relative Framing of Contribution and Minimum Level Increase Public Good Contributions?**

**Xianghong Wang**  
**Renmin University of China**

**ABSTRACT:**

Individual contributions to public goods can be framed in absolute amount or as a relative proportion of one's income. This paper examines the effect of such framing on contributions of group members to a public good in a laboratory experiment. The framing effect can be resulted from shifting of reference points or fairness awareness. In our experiment, members in a group have heterogeneous endowments with high and low types and they play public good games both without and with minimum contribution levels (MCLs). As a treatment, both the contribution metric and MCLs are expressed either in absolute amount or as a relative proportion of a group member's endowment. The MCL is different in absolute amount for the high and low type members, but it is the same proportion of their endowments for
the two types. The number of high endowment members also varies as a treatment to group composition. We find some important results that are consistent with our hypotheses. First, without MCL, the relative metric significantly reduces contributions, especially for the low types; the reduction also comes from more free riders. Second, the introduction of MCL significantly increases contributions. Third, the relative framing of MCL increases contributions more than the absolute MCL, therefore the difference between absolute condition and proportion condition disappear after MCL is introduced. Fourth, the average group contribution is increased by the number of high type members in a group. We discuss theories and implications of these findings.

Author(s): Xianghong Wang, Zhixin Dai


Can ostracism turns free-riders to be more cooperative? Evidence from an experiment in Thailand

Rawadee Jarungrattanapong
Sukhothai Thammathirat Open University

ABSTRACT:
In social dilemmas where personal benefits are in conflict with collective benefits, there is an incentive to behave non-cooperatively as free-riders. Ostracism is one form of punishment mechanisms to penalize uncooperative individuals in real life in many countries including Thailand. This paper aims to test whether ostracism can enhance cooperation in the public good experiments by allowing group members to expel others based on majority voting rule. This study also employed the modified public good experiment in conditional cooperation to categorize the contributors. The results showed that overall contribution level in an ostracism treatment was significantly higher than contribution level in a non-ostracism treatment about 45% in average. Free-riders were most affected by an ostracism. The contribution rates of free-riders increased 93.5% compared with contribution rates of non-ostracism treatment. Ostracized votes were well-targeted to the one who contributed lower than others' contribution level in the group. The ones who received ostracized votes increased their contribution level in the next period. However, some participants who contributed less than their group members punished other members or called as anti-social punishment, but it was not the case for the ones who have higher contribution level than their group members.

Author(s): Rawadee Jarungrattanapong


Covenants before the swords: Normative conflict and cooperation in heterogeneous groups

Christian Koch
NYU Abu Dhabi

ABSTRACT:
When agents derive heterogeneous benefits from cooperation, conflicting views about what constitutes appropriate behavior can impede their ability to cooperate. We study the ability of such heterogeneous groups to overcome this normative conflict in a public-good experiment, when individuals are provided with two instruments known to be highly effective at promoting cooperation in homogeneous groups: peer-to-peer communication and punishment. The findings indicate that communication enables most groups to establish covenants, i.e., agreements about individual contributions, while the threat of punishment (the 'sword') discourages deviations from the covenants. As a result, groups achieve the highest levels of cooperation and earnings when the two instruments act in tandem, although even then, they fall below the maximum. The timing of communication is critical: covenants dramatically reduce the use of sanctions when
communication precedes punishment. However, when punishment precedes communication opportunities, a history of sanctioning emerges which often undermines the ability of groups to cooperate later on. Our findings illustrate not only the benefits of early communication, but also that normative conflict can be an obstacle to efficient cooperation.

Author(s): Christian Koch, Nikos Nikiforakis and Charles N. Noussair


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**Individual incentive or public support: an experiment on contribution to collective goals**

Pietro Guarnieri
University of Pisa

ABSTRACT:

Relying on a novel experimental design, we investigate the effect on the achievement of a collective goal of incentives to individual contribution and of public support to the collective endeavor. Decision makers choose whether to invest the large part of their endowment contributing to reach a defined overall contribution threshold, which is met when at least 2/3 of players contribute. If the threshold is reached or overcome everyone get a reward; if not, who has contributed loses the investment. We introduce two alternative policy strategies to sustain individual contribution: in the individual incentive treatment we reduce the cost of contribution by paying back a part of it to individuals; in the public support treatment we reduce the overall threshold through a public investment (keeping constant the budget for implementing the two policy strategies). Our hypothesis is that public support, by acting on decision makers' beliefs, is more effective in favoring contribution than incentives to individuals.

Author(s): D'Alessandro S. Giannetti C. Guarnieri P.


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**Framing Effects and the Elicitation of Preferences in Social Dilemmas: the Role of (Mis)Perceptions**

Simone Quercia
University of Nottingham

ABSTRACT:

We study the deep determinants of the difference between two isomorphic social dilemmas. In the first dilemma individuals need to refrain from appropriation to maintain a socially efficient public good (Maintenance), while in the second they need to contribute to create an inexistent one (Provision). Recent literature has shown that conditional cooperation is higher in Provision compared to Maintenance but conflicting explanations for this finding have been provided. On the one hand, it has been argued that reciprocal preferences are different across the two dilemmas because the status quo, that is, where resources are initially allocated, differs. On the other hand, it has been proposed that differences are due to frame-dependent mistakes in the recognition of the game form. In this paper, we first provide an assessment of the robustness and stability of the framing effect, showing that it is (i) replicable across subject pools, (ii) stable over time within subjects and (iii) predictive of subsequent simultaneous game play. Then, we provide a detailed test of the two conflicting explanations uncovering elements of perception of the decision problems. Our results reveal that misperceptions of the game form can account only for part of the observed framing effect, but that revealed reciprocity is stronger in Provision compared to Maintenance, even after controlling for game form misperceptions. We finally show that, in contrast to what hypothesized in current theoretical models, differences in reciprocity across the two problems are due to different perceptions of kindness of others' actions.
**Does Relative Performance Information Lower Group Morale?**

Lea Heursen  
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**ABSTRACT:**  
Numerous studies document that relative performance information can intrinsically motivate humans to exert more effort in order to perform better individually. However, many organizations rely not just on individual effort, but also on the willingness of group members to help each other perform better. This study asks whether relative performance information has a detrimental effect on group morale, by creating a sense of competition among members of a reference group that translates into a reduced willingness to help. To answer this question, I design a novel laboratory experiment that allows me to vary relative performance information without varying other extrinsic rewards and to precisely measure group morale. For this purpose, I introduce the Help Game, in which group members can invest in the performance of others in their reference group by sharing general knowledge with them at a small personal cost. I find that providing relative performance information causes a large increase in the perception that group members are in competition and also weakens social ties between group members. However, relative performance information does not systematically affect the willingness to help others in the group.

**Leviathan for Sale: Social Contracts for Growing Societies**  
Jan Gogoll  
Technical University Munich

**ABSTRACT:**  
F.A. Hayek suggested that we ‘must learn to live in two sorts of worlds at once:’ A very personal microcosm consisting of relationships within a small circle of intimate individuals such as friends and family, and an extended order characterized by large-scale social interactions between many mostly anonymous individuals, e.g., the market economy. The gap between these 'worlds' is wider today than ever before due to the ongoing globalization and the diminishing influence of the traditional nation state. The moral categories that are essential for a functioning microcosm and that are based on personal trust are likely to be an insucient basis for the extended order. Yet, these categories seem to be the moral gold standard by which the extended order is judged by many. An institutional framework can be inter-preted as a moral meta-game that gains relevance with the growth of a society. As we move further away from the prehistoric small band of hunter-gatherers with its face-to-face interactions, our evolved moral toolkit may be increasingly ill-adapted to the requirements of the extended order. We conducted a laboratory experiment in which subjects were matched in groups of 2 and 6, respectively. Subjects played a stag-hunt game with a constantly growing hare. Prior to the stag hunt game subjects had the opportunity to buy an institution that would ensure the cooperative outcome in the following stag hunt game. We found that subjects' willingness to pay does not keep up with the increasing gain that a mutually enforced cooperation would imply for a growing society.
Leading-by-Example in a Public Goods Game with Heterogeneous Returns

Mikhail Ananyev
University of Bonn

ABSTRACT:

Author(s): Mikhail Ananyev
Topic: Public Goods, Groups, Morals

Altruism and strategic giving in children and adolescents

Juan Carrillo
University of Southern California

ABSTRACT:

We conduct a laboratory experiment to investigate the evolution of altruism and strategic giving from childhood to adulthood. 334 school-age children and adolescents (from K to 12th grade) and 48 college students participated in a one-shot dictator game and a repeated alternating version of the same dictator game. Each dictator game featured the choice between a fair split $(4,4)$ and a selfish split $(6,1)$ between oneself and an anonymous partner. We find that altruism (fair split in the one-shot game) increases with age in children and drops after adolescence, and cannot alone account for the development of cooperation in the repeated game. Older subjects reciprocate more and also better anticipate the potential gains of initiating a cooperative play. Overall, children younger than 7 years of age are neither altruistic nor strategic while college students strategically cooperate despite a relatively low level of altruism. Participants in the intermediate age range gradually learn to anticipate the long term benefits of cooperation and to adapt their behavior to that of their partner. A turning point after which cooperation can be sustained occurs at about 11-12 years of age.

Author(s): Juan D. Carrillo
Topic: Games: Repeated Games, N/A
Link: http://www-bcf.usc.edu/~juandc/PDFpapers/wp-LILA2.pdf

The Effects of Time Preferences on Cooperation: Experimental Evidence from Infinitely Repeated Games

Jeongbin Kim
California

ABSTRACT:

Infinitely repeated games have various applications to economics and political science, and time preferences are essential in determining behavior in infinitely repeated games. In this paper we explore the effects of time preferences on cooperation in infinitely repeated prisoner's dilemma game experiments. We implement a novel experimental design in which subjects play repeated games in an experimental session in the laboratory, but stage game payoffs are paid over a long period of time. We exogenously manipulate subjects' discount factors by changing the timing of stage game payoffs (weekly or monthly), and shock present bias by introducing a delay for the first stage game payoffs. We find that the rate of cooperation is higher when subjects are paid every week, implying that higher discount factors promote higher cooperation. We also find that the rate of cooperation is higher when there is a delay for the first stage game payoffs, suggesting that present bias reduces cooperation.
Learning with Mixed Strategies in Repeated Games

Yaroslav Rosokha
Purdue University

ABSTRACT:

We develop a model of learning over mixed strategies that extends the classic models of reinforcement learning to large, continuous state-action space. We compare our computational predictions to human subjects behavior in indefinitely repeated prisoners' dilemma and matching pennies games. In particular, we use a novel experimental approach to elicit (mixed) strategies from human subjects playing these games. Specifically, we require subjects to specify a memory-1 strategy that could respond to a variety of opponents' behaviors in a probabilistic fashion. Our approach allows us to examine which strategies subjects construct without relying on maximum likelihood estimation and to directly compare with predictions obtained from the learning model.

God may play dice, but do we?

Teresa Backhaus
WZB

ABSTRACT:

When do we cooperate and why? This simple question concerns the arguably most persistent divide between 'theory and practice', between predictions from game theory and results from experimental studies. For about 20 years, theoretical analyses predict so-called behavior strategies, i.e. strategic randomization rendering 'when' and 'why' questions largely moot, while experimental analyses seem to consistently identify pure strategies, suggesting long-run interactions are deterministic. Reanalyzing a data set comprising 150,000 decisions from repeated Prisoner's dilemma experiments, and using data-mining techniques giving pure strategies the best possible chance, we conclude that subjects play semi-grim behavior strategies similar to those predicted by theory.

Committee Voting and Moral: Laboratory Experiments

Masaru Sasaki
Osaka University

ABSTRACT:

This paper designs laboratory experiments to explore how the committee decision-making by voting affects the extent of
morality of the subjects. To measure the extent of morality, we employ the Becker-DeGroot-Marschak method (BDM) to reveal a subject's willing-to-pay (WTP) for the purchase of 50 shots of polio vaccine. These shots are donated to children suffering from poliomyelitis in poor countries through the Japan Committee, Vaccines for the World's Children (JCV). We interpret that a subject who chooses a higher WTP has a higher standard of morality. We then compare WTP between two treatments: individual and committee decision-makings by voting. This illuminates effects of the social institution such as the voting mechanism on people's standard of morality. We construct a model with individual and committee decision-makings and find that if a self-interested agent's expected utility function of payoff is characterized by single peaked preferences and determined only by his or her own outcome, his or her willing-to-pay (WTP) remains unchanged, regardless of whether the decision process is individual or committee-based by voting. We also show that an altruistic agent who believes that a decision to donate deteriorates his or her partner's well-being is induced to decrease his or her WTP. We found from experimental data that the WTP was significantly lower in committee decision-making by voting than in individual decision-making. One of the alternative intuitions behind the result is that the share of guilty and the feeling of irresponsibility arise because who is a pivotal voter is unclear under voting rules, which promotes behavior against moral standards.

Author(s): Keigo Inukai, Keisuke Kawata, Masaru Sasaki, Kengo Yasui
Topic: Applied Economics: Charitable Giving, Decision Theory: Preferences

Risk-taking for others: an experiment on ethics meetings

Caterina Giannetti
University of Pisa

ABSTRACT:
Relying on a novel experimental design, we study the effect of so-called, ethics meetings on 'risk-taking for others' when preferences of a decision maker are not aligned with those of a passive receiver. The decision makers choose between two risky gambles, one of which always implies a better outcome for himself but exposes the receiver to higher risk. In the main treatments (i.e. Ethics meetings), in contrast to the Baseline treatment, decision makers also discuss - before their decision - the consequences of their choice within a group of peers. Our results show that, in treatments with ethics meetings, decision makers tend to choose more often the less risky gamble for the receivers.

Author(s): Francesco Feri, Caterina Giannetti, Pietro Guarnieri
Topic: Social Behavior: Norms and Morals, Social Behavior: Communication

Dispensing Responsibility? - Avoidance of Ethical Dilemmas by Decision Randomization

Anja Bodenschatz
University Cologne

ABSTRACT:
Autonomous driving fuels a debate on the morality of weighing negative externalities, which may include harm of human life. Like in the popular hypothetical 'trolley problem' we are able to freeze time and take a deliberate decision as a society, which outcome we want implemented. As previous research suggests, there are individual factors of potential accident victims (e.g. young age) which trigger strong heuristics. Nonetheless, as empirical results on the 'trolley problem' show, emerging moral dilemmas might prove insolvable. When moral reasoning is triggered, people tend to apply utilitarian arguments. However, when moral emotions are triggered, people rather react in line with a deontological approach. They do not want to interfere, because harmful actions tend to evoke harsher judgements than harmful omissions. A human driver reacts upon the moment of the incident and is often not liable for damages, when no
deliberate decision was possible. Burri (2017) makes an interesting case, by suggesting that abstaining from a deliberate
decision for one option might solve ethical dilemmas, in which we fail to agree on a preferable option a priori. Burri
suggests installing a randomization of decisions within algorithms, for explicitly these situations. We test whether
randomized choices are empirically accepted at least in some cases and investigate the characteristics and boundary
conditions of these cases. We elicit participants' personal moral norms as well as social norms, based on the social norms

Author(s): Anja Bodenschatz (University of Cologne), Matthias Uhl (Technical University of Munich), Gari Walkowitz
( Technical University of Munich)

Topic: Social Behavior: Norms and Morals, N/A

Back to session: Responsibility

Guarantor Selection for the Offences of Artificially Intelligent Persons

Matthias Uhl
TU Munich

ABSTRACT:

Existing legal rules and recent debates in Europe suggest that artificially intelligent persons (AIP) are allowed to
autonomously do business, if a natural person can be held responsible for the activities of the AIP (e.g., Burri, 2017).
This includes any natural person who can guarantee for the AIP's offences: paid or unpaid volunteers - who are or are
not associated with the AIP - who did or did not cause the offence. In the paper, we examine the consequences of such
responsibility transfer from a behavioral perspective. More specifically, we investigate the legal, economic and
psychological implications of decoupling offences from sanctions. Using incentivized laboratory experiments, we focus
on four questions: i) Do punishers experience actual relief and satisfaction when sanctioning uninvolved third parties? ii)
Do sanctioned natural persons consider punishments as justified? iii) Can AIP originators effectively shift their
responsibility from a psychological perspective and do they feel free of guilt? iv) How does shifted punishment (in
comparison to direct punishment) affect the likelihood for future offence and cooperation among punishers, AIP
originators, and punished natural persons? Our study is important for a behavioral understanding of the implications of
lagged legislation and induced social consequences of autonomous AIP.

Author(s): Bodenschatz, Anja, Uhl, Matthias, Walkowitz, Gari

Topic: Social Behavior: Norms and Morals, Social Behavior: Other-regarding Preferences

Back to session: Responsibility

Evaluating the Welfare Cost of Gambling with Field Experiments in Denmark

Morten Lau
Copenhagen Business School

ABSTRACT:

We consider the welfare evaluation of gambling behavior with slot machines that have a known, negative expected
value, as welfare is defined by economists, and contrast that welfare evaluation with conventional survey measures of
'problem' gambling behavior. We demonstrate our methodology using controlled field experiments in Denmark, in which
subjects gambled with slot machines that we designed for real money. We sample 218 respondents from a national
survey designed to measure gambling prevalence, over-sampling those identified by that survey as exhibiting a
propensity for disordered gambling. Roughly one-third of our sample were characterized by the main survey instrument
as being a 'problem gambler' or as having an 'advanced risk' of becoming one. Complementary experimental tasks
measure risk preferences and subjective beliefs about multiline slot machine outcomes. This design allows a controlled
evaluation of the predictive validity of those survey measures for actual gambling choices over real money, as well as
the welfare cost of gambling behavior over real money.
Within-subject (in)consistency across different risk elicitation methods

Felix Holzmeister
University of Innsbruck, Department of Banking and Finance

ABSTRACT:
Given that risk is an integral phenomenon of many economic decisions, the question of how to properly elicit individual-level risk preferences is of substantial importance. Since the emergence of experimental economics, numerous methods to elicit and classify people's risk attitudes in the laboratory have evolved. However, evidence suggests that people's attitudes towards risks may change considerably when measured using different methods. This study contributes to the literature by examining across-methods consistency of revealed risk preferences in a within-subject experiment with four different, widely used elicitation methods. We introduce an alternative measure to evaluate consistency and find that, on average, revealed preferences are consistent in less than 50% of the feasible pairwise comparisons of methods. Simulation exercises provide sensible benchmarks for the across-methods consistency and suggest that the observed heterogeneity of risk preference estimates across methods is qualitatively similar to the heterogeneity arising from independent random draws from actually observed choices. Overall, our findings challenge the notion that different methods stably elicit the same preferences and that the method's choice architecture does not affect the classification of subjects' risk preferences.

An explanation for the equity premium puzzle based on differential discounting in the gain and loss domain

Jan Krause
CAU Kiel

ABSTRACT:
In this paper, we propose a novel explanation for the equity premium puzzle which is based on the assumption that individuals discount gains and losses differently. In a nutshell, our hypothesis is that individuals discount potential losses less than potential gains, and therefore require a premium for stocks beyond their risk attitudes. In two steps, we provide empirical evidence for the above outlined hypothesis. First, we show that the discount rate applicable to losses is lower compared to gains. In contrast to most of the existing literature, we apply an incentive mechanism that is not based on hypothetical choices, but tries to mimic real financial losses. Under this incentive mechanism, we find that losses, on average, are discounted negatively and gains positively. Second, we show that individuals become more loss averse when a mixed lottery is realized in the future rather than in the present, while their risk attitudes do not change for pure gain or loss lotteries. Given our first finding, differential discounting for gains and losses provides a plausible explanation for this effect and thereby an alternative explanation for the additional premium on stocks.
The Common Ratio Effect in Monetary and Non-monetary Domains
danae arroyos-calvera
university of warwick

ABSTRACT:
The common ratio effect (CRE) is a violation of expected utility theory (EUT) widely replicated when consequences are money amounts. Making decisions that use monetary payoffs as a simplification of reality may prompt people to use decision rules that are not so readily available in their actual everyday decisions, which mostly involve non-monetary consequences. Despite this, decision theories predict no differences across payoff types. We asked CRE questions about consumer goods and their money equivalents, and found that the CRE persisted for money, but significantly weakened for everyday objects. Because people may find it harder to make trade-offs between multi-dimensional goods than between sums of money, they may need to focus more attention on the characteristics of the goods and less on the probabilities when payoffs are more complex. The differences in the ways that money and objects are processed may have important implications for the descriptive validity of EUT in non-monetary settings.

Author(s): Danae Arroyos-Calvera, Andrea Isoni, Graham Loomes, Rebecca McDonald
Topic: Decision Theory: Risk, Methodology: Other

Risk-Taking under Accountability for Oneself and Others: A Laboratory Experiment
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International Max Planck Research School on Adapting Behavior in a Fundamentally Uncertain World (IMPRS Uncertainty)

ABSTRACT:
According to the golden rule one should treat others as one would like others to treat oneself. Thus, a person's decision should be just the same when being accountable for the financial welfare of another person than when deciding for one's own financial welfare. We examine whether decisions made under accountability differ for self and others using lottery choice tasks that contain only positive amounts (gaining lottery), positive and negative amounts (mixed lottery) and only negative amounts (losing lottery). Accountability is ensured through letting participants hold up a sign with their seat number and their decision after the experiment. We observe that when accountable for another person's welfare, participants are significantly less risk averse in the gaining lottery but only slightly less risk averse in the mixed lottery. In the losing lottery, subjects are equally risk averse for themselves as for others. These results indicate that risk aversion for another person's money seems to be sensitive to gains and losses and as long as gains are present, decisions for others lean more to risk neutrality than decisions for oneself.

Author(s): Jason Dana, Christina Strobel
Topic: Decision Theory: Risk, Games: Other

The Risk-Trust Confound: New Evidence from a Developing Country
Andre Hofmeyr
University of Cape Town

ABSTRACT:
The level of trust in a society is a key determinant of economic growth, crime rates, and many other important social
outcomes, as a host of evidence has shown. Trust is increasingly measured using economic experiments where subjects have real financial incentives to answer honestly. However, experimental measures of trust are potentially confounded by attitudes toward risk: subjects may send less in a trust game either because they are less trusting or because they are more risk averse. Several researchers have investigated the risk-trust confound but their evidence is inconclusive and their statistical analyses do not differentiate between utility function curvature and probability weighting as potential sources of the risk premium. We employ the experimental design of Houser et al. (2010) and a full information maximum likelihood statistical framework to explore the relationship between risk and trust in a sample of South African university students. We find statistically significant evidence of a risk-trust confound which is robust to the assumption that expected utility theory or rank-dependent utility theory characterises choice under risk. In addition, the link between risk and trust holds across the risk and trust environments of the Houser et al. (2010) experimental design. Finally, a rank-dependent utility model sheds further light on the risk-trust confound: the risk premium is generated by probability weighting when trustors interact with human trustees while the risk premium is generated by utility function curvature when trustors interact with computer trustees. This research highlights the importance of combining incentivised economic experiments with appropriate statistical tools to investigate the link between risk and trust, which is an issue that is relevant to economics generally, and experimental economics, specifically.

Author(s): Chetty, R., Hofmeyr, A., Kincaid, H. & Monroe, B.
Topic: Decision Theory: Risk, Social Behavior: Other-regarding Preferences
Back to session: Risk 2

The Rice Theory of Risk Attitudes

Yunfeng Lu
National University of Singapore

ABSTRACT:
We investigate how culture induced by rice cultivation influences people's risk attitudes with a large sample of Chinese university students in Beijing indexed by the proportion of rice farming in their birth province. We find that risk attitude measured by a series of incentivized experimental tasks varies positively with the proportion of rice cultivation. We further test several alternative hypotheses and show that the rice theory is the best explanation for this empirical pattern. This study provides a cultural theory on explaining the individual differences in risk attitudes.

Author(s): Soo Hong Chew, Yunfeng Lu, Richard Ebstein
Topic: Decision Theory: Risk, N/A
Back to session: Risk 2

Active versus Passive Risk Taking: An Experimental Analysis

Anna Merkel
University of Heidelberg

ABSTRACT:
In this paper, we compare risk taking behavior in situations where risk is born by commission (taking a choice) versus omission (remaining passive). While the standard literature has focused on studying behavior in situations, in which risk taking results from active choices, there are many real life examples in which risks are confronted if people remain passive. For example, health risks accumulate unless medical checks are attended. The literature on regret aversion suggests that people take more risks in these situations, given that anticipated regret is found to be smaller when negative consequences result from inaction instead of resulting from action. The same finding is, however, consistent with a default bias, i.e. a tendency to stick to options being implemented automatically. We disentangle these two effects in a simple risk experiment, in which subjects receive a lottery which can be adjusted by the subject. Adjustments, i.e. changes to the payoffs associated with the two possible outcomes, are made either by taking an active choice or by
remaining passive and not taking a choice. To disentangle the mode of choice from a default effect, we vary whether subjects start from an initially safe lottery, such that any adjustment of the lottery implies more risk taking, or from an initially risky lottery, such that adjustments lead to less risk taking. We do not find that people take more risks when risks result from inaction as compared to action. This result stands in contrast to the theory on regret aversion. However, we do find that subjects take more risk in situations, where the risky choice is implemented upon inaction. This result is consistent with a default bias.

**Author(s):** Christian Koenig, Johannes Lohse and Anna Merkel  
**Topic:** Decision Theory: Risk, Decision Theory: Bounded Rationality

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**Convex Preferences Over Lotteries**

**Paul Feldman**  
ucsd

**ABSTRACT:**

There is now a plethora of theories over risk that compete with expected utility. In an effort to test these competing theories, we use a novel elicitation procedure and acquire choices from a convex lottery space. This procedure allows us to find clear refutations of expected utility risk preferences. Our preliminary analysis finds that individuals have price-offer curves and Engel curves consistent with small deviations from a quasiconcave non-expected utility function. In other words, we find evidence in support of a preference for randomization. Future analysis will examine specific parametric models of various non-expected utility theories such as cautious expected utility, disappointment aversion, and prospect theory in an attempt to sort among theories.

**Author(s):** Paul Feldman and John Rehbeck  
**Topic:** Decision Theory: Risk, N/A

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**Decisions under Risk: Dispersion and Skewness**

**Oben Bayrak**  
centre for environmental and resource economics

**ABSTRACT:**

When people take decisions under risk, it is not only the expected utility that is important, but also the shape of the distributions of the returns: clearly the dispersion is important, but also the skewness. For given dispersion, decision makers treat positively and negatively skewed prospects differently. This paper presents a new behaviorally inspired model for decision making under risk incorporating both dispersion and skewness. We run a horse race of this theory against seven other models, and show that it outperforms many in terms of goodness of fit, and perhaps more importantly predictive ability. It can incorporate the prominent anomalies of standard theory such as the Allais paradox, valuation gap, and preference reversals.

**Author(s):** Oben Bayrak, John Hey  
**Topic:** Decision Theory: Risk, Decision Theory: Preferences  
**Link:** obenbayrak.weebly.com

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**Robust Revealed Preference Characterization of Expected Utility**
Taisuke Imai  
LMU Munich

ABSTRACT:

In the revealed preference literature, several measures of the severity of violations of the GARP have been proposed. The key idea behind some of these measures, such as the Critical Cost Efficiency Index (Afriat, 1972; Varian, 1990) and its variants, is to calculate how much we need to 'shift down' budget lines in order to remove GARP-violating choices. However, the same idea does not work when we want to study the severity of violations of expected utility (EU) theory (von Neumann and Morgenstern, 1947; Savage, 1954). This paper presents a new approach to measure the deviation of observed choices from EU in a revealed-preference setup. Consider a decision maker (DM) who is presented with a portfolio problem where she has to allocate her budget among several state-contingent monetary acts. We observe a finite number of pairs of prices and portfolio choices. We first consider a model where an objective probability is given, but we allow the DM to have a (potentially different) belief for each decision problem. We can measure how much these beliefs deviate from the objective probability by calculating the ratio between odds ratio under these beliefs. We introduce a concept, 'belief-perturbed objective expected utility (OEU) rationalization,' which allows multiple beliefs such that the deviation from the objective probability is bounded by a given number. We introduce similar concepts, 'price-perturbed OEU rationalization' and 'utility-perturbed OEU rationalization,' and show that these three concepts are equivalent given a bound. We also provide revealed-preference characterizations for these perturbed OEU rationalization concepts similar in spirit to axioms introduced in Echenique and Saito (2015). Furthermore, we introduce similar concepts in a model without an objective probability, 'perturbed subjective expected utility (SEU) rationalization,' and provide revealed preference characterizations for these as well. Even if a given choice data is not rationalized by OEU/SEU exactly, we may be able to do so by allowing some deviation captured by a bound e. The larger the bound e becomes, the easier the choice data to be rationalized by robust EU model. In a limiting case, we can always rationalize choice data. This motivates our new measure of deviation from OEU/SEU rationality, which is termed 'minimal e' - the smallest bound e necessary to make OEU/SEU non-rational to be perturbed OEU/SEU rational. We apply our measure to data from three recent experiments: Choi et al. (2014), Carvalho et al. (2016), and Carvalho and Silverman (2017). We find that deviation from OEU exhibits substantial heterogeneity across participants and demographic groups, including age, education, employment status, cognitive ability, and income to some extent, in all of these three datasets.

Author(s): Federico Echenique, Taisuke Imai, Kota Saito
Topic: Decision Theory: Risk, Decision Theory: Ambiguity

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Exploring the consistency of higher-order risk preferences

Timo Heinrich  
Durham University

ABSTRACT:

In this study we measure higher-order risk preferences and their consistency. We explore the role of country differences, the variation of stakes, and the framing of lotteries. We observe a robust dichotomous pattern of choice behavior in China, in the USA and in Germany. A large majority of choices is consistent with (i) mixed risk aversion (a preference for either combining 'good' outcomes with 'bad' ones) or (ii) mixed risk loving behavior (the combination of 'good' outcomes with 'good' ones). We also find this pattern after a tenfold increase in the stakes. Finally, our results reveal that this pattern is strengthened if the lotteries are displayed in compound rather than reduced form. We explore potential explanations for this framing effect.

Author(s): Alexander Haering, Timo Heinrich and Thomas Mayrhofer
Topic: Decision Theory: Risk, N/A

Link: [http://www.rwi-essen.de/media/content/pages/publikationen/ruhr-economic-papers/rep_17_688.pdf](http://www.rwi-essen.de/media/content/pages/publikationen/ruhr-economic-papers/rep_17_688.pdf)
Risk and Rationality: Testing Salience Theory of Choice under Risk

Adrian Bruhin
University of Lausanne

ABSTRACT:

We experimentally test Salience Theory (ST) of Choice under Risk (Bordalo et al., QJE 2012) by exposing 283 subjects to a series of lottery choices that may trigger the Allais' paradox. To reliably discriminate between ST and the most prominent behavioral alternative, Prospect Theory (PT), we exploit that the valuation of a lottery is context-dependent in ST while it is context-free in PT. We vary the choices' context by altering the correlation structure of the lotteries' payoffs. This allows us to do three things. First, we provide non-parametric and structural evidence on the two theories' descriptive performance at the aggregate level. Second, we account for individual heterogeneity in a parsimonious way and use a finite mixture model to classify subjects into EUT-, PT-, and ST-types. Third, we perform out-of-sample predictions about the frequency of preference reversals in a set of additional choices to assess the validity of our classification of subjects into types. Our experiment yields three main results. First, at the aggregate level, PT remains the best-fitting model while EUT and ST are both rejected. Second, however, the finite mixture model reveals considerable individual heterogeneity: PT is the best-fitting model for just 38% of subjects, while ST and EUT are the best-fitting models for 34% and 28% of subjects, respectively. Third, our out-of-sample analysis confirms this classification of subjects into types, as the ST-types exhibit significantly more preference reversals in the additional choices than the PT- and EUT-types.

Author(s): Adrian Bruhin, Maha Manai, Luís Santos-Pinto
Topic: Decision Theory: Risk, N/A

Testing the Axiomatic Foundations of Risky Intertemporal Choice

Kirby Nielsen
Ohio State University

ABSTRACT:

We develop a model which describes lotteries over streams of time-dated payment lotteries. This allows us to study choice under uncertainty, intertemporal choice, and the combination of the two--risky intertemporal choice--all in one unified framework. We present axioms which characterize discounted expected utility, and we test these axioms using a laboratory experiment, focusing on the interaction between risk and certainty with present and future payments. We present subjects with payment streams and use incentive compatible procedures to elicit valuations (certainty equivalents and uncertainty equivalents) of these streams. Payment streams are chosen specifically to address issues pertaining to the certainty effect and present bias. Comparing valuations allows us to detect systematic violations of the axioms.

Author(s): Kirby Nielsen
Topic: Decision Theory: Risk, Decision Theory: Preferences

The Disposition Effect when Deciding on Behalf of Others

Holger A. Rau
University of Erlangen-Nuremberg

ABSTRACT:

We experimentally test the disposition effect when deciding on behalf of others, which is a behavioral phenomenon where individuals exhibit a preference for taking smaller gains over larger ones, and vice versa for losses. We design a laboratory experiment where subjects are asked to make choices on behalf of other participants and measure the impact of decision-making on behalf of others on the disposition effect. Our results show that the disposition effect is significantly reduced when subjects are making decisions on behalf of others, compared to when they are making decisions for themselves. This finding highlights the importance of considering the influence of social context on decision-making behavior.
The disposition effect is a well-established phenomenon which describes the behavior of investors that are more willing to sell capital gains than capital losses. In this article we present experimental evidence on a situation where an investor decides on behalf of another person. In our setting, trading effort should only be affected by investors' intrinsic motivation, as trading actions only influence the profits of a matched person. In a control treatment, trades directly influence investors' profits. Overall, we find that trading on behalf of others increases disposition effects. In this treatment, we find that the effect is caused by inexperienced investors, characterized by a greater concern for others. Thus, trading for others results in an emotional burden for these investors, which leads to weak trading performance.

**Author(s):** Daniel Hermann, Oliver Mühoff, Holger A. Rau  
**Topic:** Markets: Finance, Decision Theory: Risk

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### Learning and deciding from experience

**Leonidas Spiliopoulos**  
Max Planck Institute for Human Development

**ABSTRACT:**

Decisions from description, where subjects are provided with a priori probabilities of outcomes, have dominated the economics literature on decision making under risk. Decisions from experience, however, also play an important role in the wild. It is well documented in the cognitive psychology literature, that there exists a decision-experience gap in behaviour. Namely, in decisions from description, behaviour is consistent with an as-if overweighting of low probability extreme events, whereas decisions from experience are consistent with an as-if underweighting of these events. We employ a within-subjects experiment, where each subject must make decisions from both description and experience, and we also separately elicit subjective probabilities about the likelihood of events when learning from experience. Subjects are presented with a set of lottery pairs range including from the often studied safe versus risky (with two-outcomes) lottery pair to pairs of risky lotteries with up to four outcomes each. This allows us to: a) compare decisions from description and experience for a broader range of decision tasks of varying complexity, and b) disentangle the determinants of the gap, in particular with respect to the role of subjective probability estimates of the experienced likelihood of outcomes. We confirm the existence of a description-experience gap, and provide new evidence about how this depends on the characteristics of the lottery pairs.

**Author(s):** Leonidas Spiliopoulos and Ralph Hertwig  
**Topic:** Decision Theory: Risk, Decision Theory: Ambiguity

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### Multidimensional Group Identity: An Experimental Study

**Fuhai Hong**  
Lingnan University

**ABSTRACT:**

Social identity is embedded in social structures, generated by various social processes, and has multiple dimensions. We report findings from a laboratory experiment eliciting two-dimensional social identities: a horizontal identity determined either randomly or by preferences and a vertical identity defined by income status and determined either by luck or performance. We also vary income gaps between vertical identity groups. Participants make allocation decisions between two others differing in identity attributes. We find robust evidence of in-group favoritism and that both the identity distance between the allocator and the in-group recipient and income gaps influence the degree of in-group favoritism.
A bird in the hand: ambiguity and optimism in a strategic environment.

Eli Spiegelman
Vanier College

ABSTRACT:
This experiment elicits behavior and beliefs in three within-subjects Sender-Receiver games. The Sender (he) observes a payoff distribution that may be positively or negatively correlated between the two players and sends the Receiver (she) advice about her best course of action, but not about the correlation of prizes. The Receiver then takes an action that determines the outcome for both players, either following the Sender's advice or not. When she chooses, she knows only the set of possible outcomes, the Sender's message, and the structure of the uncertainty regarding payoff constellations. This last element was the object of variation in three treatments. In the Sure treatment, incentives are always misaligned. This serves as a benchmark for the strategic uncertainty in the game. In the Probabilistic treatment, incentives are aligned with a prior probability 0.5; that is, both players are told before the Sender observes the actual payoff realization that there is a 0.5 probability that the prizes are aligned. In the Ambiguous treatment, an initial stage determines the probability of alignment from a uniform distribution of probabilities between 0 and 1. Thus at the beginning of the treatment, the players do not know the probability of alignment, and after observing the realization of the initial stage, the Sender sees the probability, but the Receiver does not. In the Sure treatment there is only a mixed-strategy equilibrium where both players mix evenly over their actions. In the other two treatments, however, there is a continuum of equilibria in three types. 'Neutral' or 'random' equilibria have Receivers mixing evenly over their actions, and the average rate of truthful advice among Senders equal to 0.5. 'Hopeful' or 'trusting' equilibria have Receivers following with some probability greater than 0.5, and Senders telling the truth with probability 1 when prizes are aligned and lying with probability 1 when they are not. 'Cynical' or perhaps 'ironic' equilibria are the inverse of the hopeful. In these Senders lie when incentives are aligned and tell the truth when they are not, and Receivers do the opposite of what was suggested. We observe that moving from the Sure to the Probabilistic treatment does not affect following behavior. However, the additional stage of the Ambiguous treatment dramatically increases the chances that the Receiver follows the suggestion, raising it from 54% to 80%. Moreover, the Senders seem able to foresee that Receivers will behave in this way, and shift significantly towards the 'hopeful' equilibrium in their messages. Also, their computed expectations of their own payoff were significantly higher in the Ambiguous treatment than in the others. Thus the Ambiguous treatment seems to make the hopeful equilibrium focal in some way.

Is Social Responsibility a Normal Good?

Roberto Weber
University of Zurich

ABSTRACT:
This paper examines whether social responsibility is a 'normal good,' whose consumption increases with income. To do so, we use an experimental market paradigm in which firms and consumers exchange products that differ in their social impact, with products that mitigate more negative externalities also costing more to produce. We vary, by treatment condition, the income level of consumers to determine its causal impact on their willingness to buy socially responsible products. We find evidence that social responsibility is a normal good. Even though the effect is small in magnitude,
increasing income increases concern for the social impact of market behavior.

**Group Identity in Gains and Losses**

Tigran Aydinyan  
University of Duisburg-Essen

**ABSTRACT:**

It has been known that human behavior exhibits systematic asymmetries in gain versus loss domains. In particular, loss can make individuals more risk taking, individualistic, selfish and prone to unethical behavior. However, at this point, the economic literature is silent whether loss intensifies the well-articulated in-group-out-group bias. How does the in-group-out-group attitude in the domain of losses compare to that in the domain of gains? Our paper aims to give answers to the above mentioned questions both experimentally and theoretically. The latter combines the theories of loss and inequality aversion to form theoretical predictions, while the former utilizes a Modified Dictator and Ultimatum Games to test the predictions implied by the model.

**The scope of justice: Attitudes on morally relevant group characteristics.**

Maj-Britt Sterba  
Max Planck Institute for Research on Collective Goods

**ABSTRACT:**

A factorial survey study is used to elicit peoples' attitudes on the right scope of distributive justice in large-scale interactions. While at the outset philosophical theories of justice have restricted their attention to the nation-state, this view on the scope of justice becomes more and more challenged by the observed global inequalities and interdependences. A critical question within this challenge is what characteristics a group must fulfill so that people within this group feel a moral obligation towards each other. The characteristics that are mostly debated in the theoretical literature are a common identity, a cooperative practice and a common coercive structure. This paper investigates the importance a disinterested observer attributes to each of these characteristics in a scenario where no party bears outcome responsibility for the observed inequality and where people face a trade-off between redistributing in favor of within-group equality or between-group equality.

**Inequality-Aversion and Risk Attitude in Simple Games**

Peter Moffatt  
University of East Anglia
ABSTRACT:
We develop a new experimental design to identify the distribution of inequality-aversion (IA) parameters. Using four sets of popular 2x2 games, we elicit choices in a list task first when only own-payoffs are visible (to estimate risk attitude (RA) over own-payoffs) and then with both player's payoffs visible (to estimate IA parameters). We assume the Fehr-Schmidt utility function, and we assume continuous variation, over the population, in the two inequity aversion parameters. Estimation is carried out using the method of Maximum Simulated Likelihood (MSL). The distribution of IA parameters assuming risk neutrality, as in the IA model, shows every subject to be averse to disadvantageous inequality. However, when we allow for risk aversion, we find instead that every subject favours disadvantageous inequality in these games. Aversion to advantageous inequality is positive whether we assume risk neutrality or not. It therefore appears that when RA is accounted for, the concept of IA may be replaced by the simpler concept of unconditionally positive concern for the payoff of the other player.

Author(s): David Butler, Andrea Isoni, Graham Loomes, Peter Moffatt, Daniel Navarro-Martinez

Topic: Games: Information, Methodology: Experimental Design, Tools and Practices

Generalized serial cost sharing mechanisms for the provision of non-excludable threshold public goods

Zhi Li
Xiamen University

ABSTRACT:
Following Gailmard and Palfrey (J Pub E, 2005, GP thereafter), we introduce two uniform price mechanisms, the uniform price auction (UPA) mechanism to extend the direct serial cost sharing to non-excludable public goods, and the uniform price cap (UPC) mechanism to solve the inefficiency of serial cost sharing by a variation of residual serial cost sharing. Both cost sharing mechanisms are budget balanced, individually rational, anonymous, but are not strategy proof. We compare these two cost sharing rules with voluntary cost sharing with proportional rebates (PR) and with no rebates (NR, or PPM) as in GP for the provision of non-excludable public goods under incomplete information. We characterize the Bayesian Nash equilibria (BNE) of the two new mechanisms and conduct laboratory experiments to compare the performance of the four mechanisms. We find that UPA induces significantly higher value revelations than all the other three and UPC generates significantly more efficient allocations than all the others. In both uniform price mechanisms, that an individual's payment is not affected by the declarations of valuation higher than their own contributes to the higher value revelation and more efficient allocations by reducing the equilibrium size and facilitating coordination toward more efficient equilibria. Our results are robust to group size.

Author(s): Zhi Li, Christopher Anderson, and Stephen Swallow


Using visual cues of observability to test the robustness of moral wiggle room

Zachary Grossman
UC Santa Barbara

ABSTRACT:
People will use ignorance as an excuse for bad behavior, but are reluctant to do so when they must actively choose to remain ignorant. One possible reason why having to actively choose ignorance destroys its strategic value is that the extra salience of active choices draws deeper scrutiny than do passive choices. We test this hypothesis using a stylized
The treatment featured an image of eyespots in the background of the computer screen as participants made their
choices, serving as a cue for observability. Unlike Haley and Fessler, who found a strong effect of eyespots on dictator
giving, we find no effect of eyespots on ignorance rates nor on conditional giving.

Author(s): Zachary Grossman and Michael Cooper
Topic: Social Behavior: Other-regarding Preferences, Social Behavior: Norms and Morals

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Social Image, Justification, and Downplaying of Social Impact

Joel van der Weele
University of Amsterdam

ABSTRACT:

Author(s): Manuel Foerster and Joel van der Weele
Topic: Social Behavior: Other-regarding Preferences, Social Behavior: Norms and Morals

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Compliance in teams: Implications of joint decisions and shared consequences

Tim Lohse
Berlin School of Economics and Law

ABSTRACT:

Inspired by company scandals such as Volkswagen or Enron, recent evidence from the deception literature points
towards increased non-compliance with legal requirements of teams and groups (Kocher et al. (2017), Weisel and Shalvi
(2015)). The present paper promotes a deeper understanding of this more dishonest behavior. Using a tax compliance
framework, we investigate whether it is the team decision-making process per se that leads to decreased compliance or
the shared economic consequences. Our experimental setting consists of a repeated declaration task on a binary income.
Subjects with a high income have an incentive to underreport and evade taxation, but this comes at the cost of a fine in
case of an audit. The experiment follows a 2-by-2 between-subject design: first, we vary whether subjects decide about
their declared income individually or jointly in a team. Teams can make non-binding agreements via a chat and each
member subsequently reports both the own income and the income of the team member. Second, we vary whether
subjects are liable individually or jointly. Joint liability corresponds to mutually shared consequences, both for benefits
of successful evasion attempts but also for potential fines. Our results indicate that teams are substantially less compliant
than individuals. Joint liability is the main driver and leads to a significant decrease in compliance rates, independent of
whether the evasion decision is made by an individual subject or in a team. We find no significant evidence for an effect
of group decision-making per se. However, teams are characterized by substantial coordination of compliance behavior.
The findings have implications both for the design of governance rules and enforcement policies: whenever compliance
decisions involve several agents, effective prevention of non-compliance might be achieved by holding each member
fully accountable in terms of monetary (and legal) consequences.

Author(s): Tim Lohse and Sven A. Simon
Topic: Social Behavior: Lying and Cheating, Social Behavior: Group Behavior

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Telling the Other what One Knows? Mutually Truthful or Mutually Lying: Cheap-Talk in
Modified Acquiring-a-Company Experiments
The Acquiring-a-Company game, in which the buyer's and seller's evaluations of the company are linearly correlated, is modified by privately informing not only the seller about the buyer's evaluation of the firm, but also the buyer about how proportionally less the seller values the company in case it is kept. We allow both the seller and the buyer to send a cheap-talk message to their partner before the buyer proposes a price. Such two-sided private information might question efficient trade, which parties could avoid by truthful message exchange preceding the negotiation. This is why, in spite of the robust evidence of lying, one could observe participants to lie less when it may be mutually helpful. Nevertheless, seller participants are predicted to more often overstate the value of the company and buyer participants to more often belittle the seller's evaluation share.

Author(s): Andrej Angelovski, Daniela Di Cagno, Werner Guth, Francesca Marazzi
Topic: Social Behavior: Lying and Cheating, Games: Bargaining
Link: https://www.dropbox.com/s/efxn7khym2xhf8w/paper-lying%20focus-ESAworld.pdf?dl=0
the extensive information sharing present nowadays, personal information disclosure as a new form of competition for benefits renders the (dis)advantages of information sharing questionable.

**Author(s):** Viola Ackfeld, Werner Guth  
**Topic:** Games: Information, Social Behavior: Group Behavior  
**Back to session:** Social Behavior and Lying

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**High Social Status Induces Prosocial Behaviour**

**Jin Di Zheng**  
**University of Amsterdam**

**ABSTRACT:**

Does a high social status make people more generous? Using a laboratory experiment, I generate social status (either randomly or earned) and compare prosocial behaviour between people with high and low status. In a novel one-shot, two-player, two-stage game, a high-status subject is paired with a low-status subject to determine joint production. Player 1 gives a nonbinding advice a to player 2, suggesting an effort level for player 2. Player 2 learns about a and determines the actual effort for both players. Total effort is constant and it is costly to exert effort. Deviation from the advice causes a loss in the team payoﬀ. Results show that prosocial behaviour is status-speciﬁc: 1) High-status subjects are less selﬁsh than their low-status counterparts. 2) When status is earned, there are even fewer selsh players 2 with high status; moreover, they deviate less from the advice such that less efficiency is lost.

**Author(s):** Jin Di Zheng  
**Topic:** Social Behavior: Other-regarding Preferences, N/A  
**Link:** https://www.dropbox.com/s/yebax17mow6ymqy/High%20Social%20Status%20Induces%20Prosocial%20Behaviour.pdf?dl=0  
**Back to session:** Social Image and Status

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**Social Information and Selfishness**

**Yilong Xu**  
**University of Heidelberg**

**ABSTRACT:**

We study the effect of social information in a twice-repeated dictator game. We vary whether or not participants receive information about the ﬁrst round offers of other pairs before they play the second round of the dictator game. Independently we vary whether being the dictator is determined randomly or earned. We ﬁnd that ﬁrst round offers are higher with than without social information; when dictators anticipate that their offers will be revealed to other pairs they act more generously. No such effect is found when dictators’ positions are earned. Second round offers are generally lower than ﬁrst round offers. This decline is signiﬁcantly stronger with than without social information, indicating that learning the offers of their peers makes dictators more selﬁsh.

**Author(s):** Jan Potters and Yilong Xu  
**Topic:** Social Behavior: Other-regarding Preferences, Social Behavior: Norms and Morals  
**Back to session:** Social Image and Status

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**The Welfare Effects of Social Recognition: Theory and Evidence from a Field Experiment with the YMCA**
ABSTRACT:

A growing body of empirical work shows that social recognition can significantly influence individuals' choices. This paper investigates whether social recognition is a socially efficient lever for influencing individuals' decisions. Theoretically, we show that whether social recognition is more efficient than financial incentives depends on the shape of the social recognition utility function, which determines whether social signaling is a positive-sum, negative-sum, or zero-sum game. To quantify the theoretical findings, we report results from a novel field experiment on promoting attendance to the YMCA. We quantify the impact of social recognition on attendance and elicit people's willingness to pay for social recognition in different future states of the world. We find that social recognition increases YMCA attendance by 23% over a one-month period. We then estimate people's willingness to pay to be recognized at varying levels of attendance, and find that social signaling is a moderately positive-sum game. Unlike previous attempts at evaluating 'nudges', we are able to generate our welfare estimates using non-parametric methods that do not rely on the assumption that individuals hold rational expectations about their future behavior. Our experimental framework provides a general template for robustly evaluating the welfare effects of non-financial policy levers.

Author(s): Luigi Butera, Robert Metcalfe, Dmitry Taubinsky

Topic: Social Behavior: Other, Decision Theory: Preferences

Back to session: Social Image and Status

Testing three generations of social preferences models

Tobias Regner
University of Jena

ABSTRACT:

Our experimental design systematically varies image concerns in a dictator/trust game. In comparison to the baseline, we either decrease the role of self-image concerns (by providing an excuse for selfish behavior) or increase the role of social-image concerns (by conveying the transfer choice to a third person). In this set up, we analyze the underlying processes that motivate subjects to give less/more. Controlling for distributional preferences and expectations, our results indicate that moral emotions (guilt and shame) are a significant determinant of pro-social behavior. The disposition to guilt explains giving in the baseline, while it does not when an excuse for selfish behavior exists. Subjects' disposition to shame is correlated to giving when their choice is public and they are identified.

Author(s): Tobias Regner

Topic: Social Behavior: Other-regarding Preferences, Psychology and Biology: Emotions

Back to session: Social Image and Status

Employing Behavioral Economics: Improving the Efficiency of TV License Fees Collection

Jana Cahlikova
Max Planck Institute for Tax Law and Public Finance

ABSTRACT:

Governments and public institutions world-wide must rely on the collection of taxes and fees for their sole existence, which is highly challenging as the rates of non-compliance are often high. We employ behavioral economics to improve the efficiency of TV license fees collection in the Czech Republic. We run a large-scale field experiment with over 80,000 households that have been identified as potentially evading the fee and test several motives for the non-compliance. We mail letters to the households, orthogonally varying i) the information content and (ii) the level of attention and reciprocity raised by the envelope. We find that stating the negative consequences of non-compliance
attention and reciprocity raised by the envelope. We find that stating the negative consequences of non-compliance increases both the response rate and the rate of new registrations, compared to the baseline letter. Treatments focused on the explanation of the fee's purpose, reciprocity, increasing the sense of agency, and invoking social norms are as effective as the baseline. Envelopes designed to raise attention and reciprocity work slightly worse than the baseline envelope. While we find differences in levels between the capital city and the rest of the country and between younger and older respondents, the treatment effects are similar on all groups.

Author(s): Jana Cahlíková, Lubomír Cingl, Katerina Chadimova, Miroslav Zajíček
Topic: Field Experiments: General, Social Behavior: Lying and Cheating
Back to session: Tax Compliance and Nudging

Endogenous Crackdowns, Information Disclosure and Tax Compliance: An experimental investigation

Zhixin Dai
RENMIN UNIVERSITY OF CHINA

ABSTRACT:
We present a simple model in the context of tax evasion to analyze the efficacy of endogenous crackdowns, i.e., sudden and dramatic increases of audit probability triggered by a low level of compliance. We test this model experimentally. Our results show that: (a) compliance reacts quickly to the occurrence of crackdowns; (b) subjects report more than half of their income even during non-crackdown periods; (c) announcements of crackdown increase significantly tax compliance both when crackdowns are pre-announced and when they are announced ex post; (d) subjects are able to coordinate quickly to end crackdowns. Our results have important implications for policy-makers in terms of designing more effective crackdown policies.

Author(s): ZHIXIN DAI
Topic: Applied Economics: Other, Social Behavior: Lying and Cheating
Back to session: Tax Compliance and Nudging

Tax compliance with endogenous audit selection and heterogeneity of income

Rostislav Stanek
Masaryk University

ABSTRACT:
It has been shown in the experimental tax compliance literature that endogenous audit selection mechanism (ASM) increases tax compliance. However, this literature assumes that the tax authority has an unbiased observation of the actual taxpayers' income and consequently the taxpayers with the largest difference between the observed and reported income are most likely to be selected for audit. In reality the tax authority might not have unbiased information about the actual incomes as these might be observed only for taxpayers who have been selected for audit. In this case the ASM can be based on reported incomes only. The aim of the paper is to design an endogenous ASM that uses only the reported incomes and experimentally compare the tax compliance under the endogenous and random ASMs. We develop a theoretical model where taxpayers have heterogeneous income and the ASM is based only on the reported income. We show that in the symmetric Bayes-Nash equilibrium the proposed endogenous ASM entails a higher compliance than the random ASM. The experimental test of the design confirms the theoretical prediction that taxpayers have higher compliance under the endogenous ASM than under the random ASM.

Author(s): Rostislav Stanek, Ondrej Krcal, James Tremewan, Milos Fisar, Jiri Spalek
Topic: Applied Economics: Other, Public Choice: Other
Using Behavioral Interventions to Improve Water Payments in Kosovo: Framings and Identity Management

Sebastian Tonke
University of Cologne

ABSTRACT:
Non-payments for public utilities pose a constraint to maintain and expand infrastructure in developing countries. We use behaviorally informed interventions to improve payment behavior in a randomized field experiment in cooperation with the Regional Water Company Prishtina (Kosovo) among around 10000 private households. Over a period of three months (June-August 2017), we attach stickers to customers' invoices and use a marker to highlight key figures on the bill. In total, there are six treatments (2x3 design) and an untreated baseline. The stickers vary positive and negative frames. The positive frames emphasize the positive consequences of paying (e.g., 'Paying ensures 24 h water supply') and the negative frames emphasize consequences of not paying (e.g., 'Not-paying risks 24 h water supply'). Within each frame, we further test two types of self-concept treatments over a basic sticker. These self-concept treatments intend to strengthen the link between payment behavior and the self-concept of customers by asking customers to take on an identity (e.g., 'Please be a responsible citizen') or attributing an identity (e.g., 'You are a responsible citizen'). The basic stickers increase the collection efficiency by on average about 5% during the first seven months of the intervention. The persuasion and identity stickers show larger effects of around 15-20%. The difference in treatment effects stems from differences in behavior after the intervention ends (August 2017). Further, early analysis suggests that negative as well as attribution treatments are more effective among payers with lower past payments. We conduct street and telephone surveys to shed light on the behavioral mechanism. The study highlights the potential of identity based behavioral interventions to improve payment behavior beyond the initial treatment periods. This is particularly important to understand in settings where frequent action is necessary (regular payments).

Author(s): Sebastian Tonke
Topic: Field Experiments: General, Applied Economics: Economic Development

Dominated Contracts in Team Production

Simin He
Shanghai University of Finance and Economics

ABSTRACT:
We introduce dominated contracts, which penalize low output but give no rewards for high output, into an experimental team production game. We find that such contracts, when exogenously implemented, mitigate the free-riding problem and hence reduce under-productivity. When team members can endogenously determine whether to implement the dominated contract or not, we find a majority of the teams voluntarily choose the dominated contract, which later leads to a further boost in productivity compared to the teams exogenously given the dominated contact.

Author(s): Simin He, Bin Miao
Topic: Games: Coordination, Social Behavior: Group Behavior

Team Formation with Complementary Skills
ABSTRACT:

One explanation for the increasing prevalence of self-managed teams in the workplace is that they enable workers with complementary skills to specialize in the tasks they do best, a benefit that may be enhanced if workers can sort themselves into teams. To assess this explanation, we design a real-effort experiment to study the endogenous formation of teams, and its effect on productivity, when specialization either is or is not feasible. We consider an environment in which production requires the completion of two complementary tasks and workers differ in whether their skills are balanced across both tasks or they are far better at one task than the other, with overall ability held constant. We find that, while team formation does not affect output when specialization is not possible, there is a strong positive interaction between endogenous team formation and the ability to specialize, indicating that endogenous team formation is a particularly effective mechanism for promoting team output in production environments that enable the exploitation of skill complementarities. Consistent with agents successfully seeking partners to maximize their productivity, participants prefer to be matched with more balanced types when both teammates must complete both tasks, but seek out those with more extreme, but complementary, skills when specialization is possible. Finally, participants exhibit a preference for being matched with partners of opposite skills even when they cannot specialize and there is no benefit to forming complementary teams.

Author(s): Muruvvet Buyukboyaci and Andrea Robbett
Topic: Games: Contests, Social Behavior: Group Behavior

Leadership and Coordination in Complex Team Games.

Emike Nasamu
University of East Anglia

ABSTRACT:

We investigate the efficacy of leadership in a team directed search environment. Previous literature in experimental economics has focused primarily on the capability of a leader to establish successful coordination in simple games with small strategy spaces. In complex real-world scenarios, not only must teams coordinate effectively, but they often must identify potentially viable courses of action in the first place. The use of stylised coordination games may therefore limit the scope for effective leadership. We test this hypothesis using a novel experimental task, the Team Orienteering Problem (TOP). The TOP is a routing problem based on the Traveling Salesman Problem (TSP) from combinatorial optimisation. The optimal solution to the TOP is one out of millions of feasible solutions. Therefore the team cannot consider all candidate solutions, but must coordinate on identifying promising feasible solutions that may be at least close to optimal. Teams compete head-to-head, with the team finding the more efficient solution winning a larger prize. We conduct an experiment in which teams are assigned at random to one of three treatments: teams with no designated leader; teams with an exogenously-appointed leader; and teams who vote to elect a leader.

Author(s): Emike Nasamu, Theodore L. Turocy, Peter Dawson
Topic: Games: Coordination, Social Behavior: Group Behavior

Games Played by Teams of Players

Thomas Palfrey
Caltech
We develop a theory of equilibrium in games where each player in the game is a committee, or team. Each member of each team has unbiased imperfect estimates of the equilibrium expected payoff for each available action that team can take. Team members share the same payoff function. An opinion aggregation rule transforms these individual estimates into a team decision. In many games and for many aggregation rules, team equilibrium choice behavior more closely approximates Nash equilibrium as the team size increase. For any finite strategic form game, team equilibrium based on the plurality voting aggregation rule converges to Nash equilibrium in large games. General existence of team equilibrium for arbitrary aggregation rules is also established. Results from an experiment on a battery of different games played by teams will be reported.

Author(s): Jeongbin Kim and Thomas R. Palfrey
Topic: Games: Information, Social Behavior: Communication
Back to session: Teams

The art of asking: Pre-play communications in dictator games

Joo Young Jeon
University of Reading

ABSTRACT:

In this study we explore the subtle effects of pre-play communications in dictator games. A recipient can send a message of an amount he/she would expect from a dictator and the dictator may receive the message before his/her decision. Since who the recipient communicates with and a framing of game can affect dictator's giving, we vary two factors, framing (giving vs taking) and modes of communications (to an experimenter vs to the dictator). We find two results. First, communication influences the giving behaviour but there exist significant framing effects. Asking is powerful in a negative frame. And second, the recipients send different messages to the experimenter than to the dictator.

Author(s): Subhasish M. Chowdhury, Joo Young Jeon, Sang-Hyun Kim, Angela Sutan
Back to session: Trust and communication

Guilt Aversion and Trust: An Analysis of Heterogeneous Factors

Elisabetta Leni
University of Essex

ABSTRACT:

A large body of research in the social sciences suggests that expectations are relevant for decisions involving trust. A popular explanation of the influence of expectations on trust is guilt aversion. This paper explores potential sources of heterogeneity in guilt averse behavior using a novel experimental design which allows studying individual heterogeneity in guilt aversion across different incentive schemes in a trust game. The results of the experiment suggest that guilt aversion is heterogeneous and stake-dependent for a substantial proportion of participants. A detailed analysis of the influence of factors determined at birth or during childhood reveals that sex and some Big-Five personality traits significantly influence the likelihood of adopting guilt averse strategies in the lab. Interestingly, different traits seem to be relevant for trustors and trustees revealing a multiplicity of causes for guilt aversion.

Author(s): Elisabetta Leni
Topic: Social Behavior: Norms and Morals, Social Behavior: Other-regarding Preferences
Link: https://www.essex.ac.uk/people/LENIE22205/elisabetta-leni
Back to session: Trust and communication
He who sets the price, determines the quality: trust in supply chain relationships

Jason Shachat
Durham University

ABSTRACT:
We experimentally test the presence and relative strength of the gift exchange hypothesis in a procurement setting under alternative auction mechanisms. When price determining messages are chosen by sellers, for example as in posted offer markets and buyer determined auctions, rather than buyers, as in posted bid markets or seller determined auctions, prices are greater but is realised trust and gains from exchange.

Author(s): Daniel Houser, Jason Shachat and Wei Wei Zheng
Topic: Social Behavior: Norms and Morals, Markets: Market design and Matching
Back to session: Trust and communication

Intermediation and discrimination in an investment game: an experimental study

Francois Cochard
Univ. Franche-Comte

ABSTRACT:
Testings on the housing market show that real estate agents discriminate minority groups, although to a lesser extent than owners (see for example Flage, 2017). The goal of this experimental study is to provide explanations to this difference in behavior. More generally in economic transactions, are intermediaries less prone to discriminate than the parties directly involved? We do not want to simulate a sort of 'housing market' the lab. Instead, we prefer basing our experiment on a well-known benchmark experimental game. We note that commercial transactions (especially house renting) often require a significant amount of trust among parties. Indeed, a house or apartment can be damaged or improved by the tenant. Hence, we base our experiment on the famous 'trust' or 'investment game' (Berg et al., 1995), which can be used to study a simple trust/investment relationship in experimental economics. We introduce in this simple setting a third player (the 'Intermediary') to play the investment game with the Owner's endowment. It should be noticed however that in this study, we consider a 'pure intermediary' to the extent that this subject will receive a flat payoff, so that he/she will take no risk in this game. This is similar to Kvaloy and Luzuriaga (2014). We create social groups (social identities) to investigate what happens if the Owner and the Intermediary are (or not) in the same group as the Recipient. Given this framework, our research question is the following: Is the Intermediary less prone to discriminate than the Owner? Theory can provide some guidance to make conjectures. First, a purely 'selfish' Intermediary should be completely indifferent regarding the amount sent. So there is no precise prediction under this model. Social preference models can however provide some predictions. If the Intermediary has for example a preference for efficiency, he/she should send the maximum and may thus discriminate less than the Owner given the fact that he/she takes no risk. If the Intermediary feels a form of 'responsibility' towards the Owner, he may be willing to protect him/her against risk, and then to discriminate as much or even more. We refer to two main strands of the literature. The first one is the literature on intermediation and on risk-taking on behalf of others. Kvaloy and Luzuriaga (2014) run an experiment on the trust game with a pure intermediary. Surprisingly, they observe no difference in the average sending of Intermediates and Owners. There are many papers dealing with risk-taking on behalf of others: does the intermediary take more or less risk when he/she plays with another person's money? The evidence is mixed, as some studies tend to show that the intermediate takes less risk (Charness and Jackson 2008; Reynolds et al. 2009; Eriksen and Kvaloy 2010), while others find the opposite effect (Chakravarty et al. 2011 and Agranov et al. 2010). Our paper is also related to the literature on social identity and discrimination. Many experiments address this question and some find discrimination while others do not (concerning more particularly trust game environment, see for example; Guth et al., 2005; Hargreaves & Zizzo, 2009; Bouckaert & Dhaene, 2004; Burns, 2004; Fershtman & Gneezy, 2001; Haile et al., 2008 and the meta-analyses of Balliet & De Dreu, 2014 and Lane, 2015). Brief overview on the results: In the Baseline
treatment, we observe no significant differences between the amount sent by the Owner and by the Intermediate. This is similar to Kvaloy and Luzuriaga (2014). In the IDIR and IDUR treatments, Owners do not send significantly different amounts in the In-group and in the Out-group conditions. Therefore, there does not seem to be any significant discrimination from Owners. In contrast, Intermediates send significantly more in the In-group than in the Out-group conditions. However, they do not send less than Owners in the Out-group conditions. Instead, they send much more in the In-group conditions. Therefore, we can say that they discriminate, but in the positive direction. Finally, there does not seem to be significant different differences between the IDIR and the IDUR treatments.

Author(s): Francois Cochard, Alexandre Flage, Emmanuel Peterle

Topic: Social Behavior: Norms and Morals, Psychology and Biology: Gender and Individual Differences

Distributional Preferences Explain Individual Behavior Across Games and Time

Daniel Mueller
University of Innsbruck

ABSTRACT:

We investigate in a within-subject analysis the importance of distributional preferences for behavior in other games in a large and heterogeneous sample of the Danish population. We find robust evidence for the significant explanatory power of distributional preferences. In fact, compared to twenty-one covariates, distributional preferences turn out to be the single most important predictor of behavior. Moreover, subjects who are efficiency-seeking, inequality-averse or have maximin preferences contribute more to the public good and exhibit a higher propensity to pick the more equal allocation in the trust game than other types. Our results hence suggest that there is a component of distributional preferences that is stable across contexts and over time. Finally, we find that almost 90% of subjects can be classified as one of just four types: efficiency-seeking, inequality averse, selfish and maximin.

Author(s): M. Hedegaard, R. Kerschbamer, D. Muller and J.-R. Tyran

Topic: Social Behavior: Other-regarding Preferences, Games: Other

Trust under financial distress

Sascha Fullbrunn
Radboud University

ABSTRACT:

The trust game is usually played under conditions in which participants are in good financial shape. However, what happens in a situation in which participants face financial distress? What happens if only trust allows you to get out of your losses? To answer those questions, we consider the treatment differences between an ordinary trust game and a trust game under financial distress applying the strategy elicitation method.

Author(s): Fullbrunn, Sascha; Vyrastekova, Jana

Topic: Social Behavior: Other, N/A

Dilution Illusion

Aljaz Ule
ABSTRACT:
Nominal representation of choices has been shown to affect individual decision-making (e.g., money illusion, ratio bias and medium maximization). This study explores how it affects choices in an interpersonal, social context. Specifically, we use a laboratory experiment to measure how nominal representation of endowments influences pro-social behavior and theft. Aversion to nominal inequality predicts more theft when actions do not affect others in nominal terms, but do affect them in real terms. We provide evidence for such 'dilution illusion', and find that it is mitigated by cognitive ability.

Author(s): Anouar El Haji and Aljaz Ule
Topic: Social Behavior: Other-regarding Preferences, Decision Theory: Other
Back to session: Trust and Cooperation (SHORT)

Intergenerational Cooperation: an Experimental Study of Ageism in Trust and Exploitation

Dennis A. V. Dittrich
Touro College Berlin

ABSTRACT:
Financial exploitation of trusting older adults by younger adults is the most prevalent and frequent form of elder abuse and a source of mounting concern given the increasing demands for intergenerational cooperation across greying societies. We conducted an experiment with older (>55 years old) and younger (<26 years old) adults who repeatedly played 4 versions of a centipede game (CG) within and between age-groups. By altering payouts across 4 version of the CG we can distinguish 'cooperative' behavior motivated by equal payoffs from instrumentally 'cooperative' behavior motivated by varying levels of incentives made available for exploitation through trust-based turn taking. In this CG behavior we find some evidence of 'reverse' ageism: older adults show a preference for cooperating with other older adults but not with younger adults.

Author(s): Micaela M. Kulesz, Dennis A.V. Dittrich, Eric Schniter
Topic: Social Behavior: Other, Social Behavior: Other-regarding Preferences
Back to session: Trust and Cooperation (SHORT)

Money Illusion and Intentions in an Experimental Labour Market

Susanna Grundmann
University of Passau

ABSTRACT:
Nominal inertia, the tendency to think in nominal rather than real values, is normally attributed to money illusion, meaning a limited cognitive capacity to reason through the veil of money. We hypothesise that this could also have a rational cause: Nominal values are signals of underlying intentions. Using a gift-exchange game, we investigate whether employees react to such signals. Employers set nominal wages intentionally, but the real wage also varies unintentionally with the price level, which is determined endogenously by the nominal wage paid by other employers. We find that employees tend to reciprocate high nominal wages and disregard real wages, which shows that they fail to pierce the veil of money. Yet even when they are informed about real wages, they still reciprocate high nominal wages if faced with human employers. This effect disappears when faced with computerised employers, supporting our hypothesis of intentionality.

Author(s): Susanna Grundmann, Marcus Giamattei, Johann Graf Lambsdorff
Learning and Reciprocity in Adjustments

Johannes Leutgeb
WZB

ABSTRACT:
I propose a notion of reciprocity in adjustments of actions rather than ' as commonly assumed in the literature ' actions. Agents reciprocate kind adjustment of actions with kind adjustments of their own. Such a process can explain learning behavior supporting cooperation in repeated games. Reanalyzing experimental data from Huck et al. (2017), I find that reciprocity in adjustments plays a significant role for learning but reciprocity does not eliminate win-continue lose-reverse (WCLR) as an important cooperation-supporting heuristic.

Author(s): Johannes Leutgeb

Universal Difference Aversion

Karim Sadrieh
University of Magdeburg

ABSTRACT:
Individuals have been shown to exhibit aversion towards inequalities of their own payoffs compared to those of others. In this paper, we claim that the distaste for inequality goes beyond the payoff differences with ego-involvement. The concept of universal difference aversion (UDA) that we outline in this study also includes a distaste for payoff inequalities amongst others. We introduce a model that includes UDA as an element of the decision-maker's utility function in a formal framework. Our laboratory experiment shows that about half of the choices are in line with UDA preferences. The allocation supported by UDA is chosen by over two-fifth of the subjects, even when all other motivational drivers that we consider (efficiency, ERC, ego-involved difference aversion, maximin, and own payoff maximization) support a different allocation choice. We also run a field experiment to test whether UDA survives the competition by in-group favoritism towards members of the natural social groups. Our field experiment shows that only strong social identities can reduce the prevalence of UDA type allocation choices. However, even in the most extreme case (social identity over political orientation), the frequency of UDA type allocations is one and a half times greater than the frequency of choices favoring the in-group.

Author(s): Gary Charness, Abdolkarim Sadrieh, and Anke Sterzing

Strategic use of facial expressions in trust games

Federica Alberti
University of Portsmouth

ABSTRACT:
Do people make strategic use of their facial expressions? We test the hypothesis that people use their facial expressions to increase own payoffs in trust games, in particular, that second movers choose a smiley face, anticipating a more favourable response by first movers. We compare choices of facial icons between two treatments: in one treatment a second mover's choice is disclosed to the first mover prior to the decision phase, while in the other treatment the second mover's choice is never disclosed to the first mover. We observe a tendency for second movers to act consistently with our hypotheses. A final questionnaire elicits emotional intelligence scores of the participants. Emotional intelligence is not correlated with the choice of facial icon.

**Author(s):** Federica Alberti, Joo Young Jeon, and Kei Tsutsui  
**Topic:** Social Behavior: Other, Social Behavior: Communication

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**(Non-)cooperation preferences and destruction behavior**

J. Philipp Reiss  
Karlsruhe Institute of Technology (KIT)

ABSTRACT:

Understanding antisocial behavior receives increasing attention. The predominant tool of measurement is the joy-of-destruction minigame (mini-JoD) used in a variety of settings, ranging from lab to field. In this paper, we set out to understand if there is a connection between antisocial behavior and (non-)cooperation preferences. Unlike hypothesized, we do not observe a strong connection between destruction behavior and (non-)cooperation preferences. Additionally, we seek to improve the understanding of the mini-JoD and study how two implementation parameters, provisional cost of destruction and the origin of the endowment, influence antisocial behavior.

**Author(s):** Eva Luetzelschwab and J. Philipp Reiss  
**Topic:** Social Behavior: Other-regarding Preferences, Social Behavior: Lying and Cheating

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**Competitive Preferences and Ethnicity: Experimental Evidence from Bangladesh**

Abu Siddique  
University of Southampton

ABSTRACT:

In many countries, ethnic minorities have a persistent disadvantageous socioeconomic position. We investigate whether aversion to competing against members of the ethnically dominant group could be a contributing factor to this predicament. We conducted a lab-in-the-field experiment in rural Bangladesh recruiting males from the ethnic majority (Bengali) and an underprivileged ethnic minority group (Santal) that is severely discriminated against. We randomly assign participants into groups with different ethnic composition and elicit a measure of their competitiveness. We find that when compelled to compete, there are no ethnic differences in performance and that both ethnic groups perform better in ethnically-mixed groups than in homogeneous groups. We also find that the ethnic composition of the group of competitors is an important determinant of competitive entry and its effect varies by ethnic group. Members of the ethnic minority group are less likely to compete in groups where they are a numerical minority than when all competitors are coethnic, whereas the reverse is true for members of the ethnic majority group. This difference is not explained by heterogeneity in performance, risk preferences, beliefs about relative ability or various socioeconomic characteristics of individuals or of their opponents. We conclude that differences in unmeasured markers of ethnicity, such as social power and status, must drive these differences in preferences for interethnic competition.

**Author(s):** Abu Siddique & Michael Vlassopoulos  
**Topic:** Social Behavior: Other, Field Experiments: General
Blind Rage: Inequality, Intentions, and Indiscriminate Punishment

Stefania Bortolotti
Max Planck Institute, Bonn

ABSTRACT:

The stark increase in the within-country inequality appears to be linked to widespread discontent and frustration that can in turn fuel anger, social unrest, and protests. In an experiment, we study how the unequal distribution of monetary payoffs can trigger blind rage against people with whom there is no previous or expected future contact, in the form of indiscriminate punishment. Differently from second and third-party punishment, the threat of indiscriminate punishment does not provide the potential victim any incentive to reduce inequality, and is not associated with any possible future gains for the perpetrator. We further investigate whether indiscriminate punishment is more common when the advantaged players display the unequivocal intention to generate inequality. We find evidence that large degrees of inequality can trigger frustration and lead to indiscriminate punishment, and that the intentions of the advantaged players are key in triggering such behaviour.

Author(s): Bigoni, Bortolotti, Nas Ozen

Topic: Social Behavior: Other-regarding Preferences, Social Behavior: Norms and Morals

Does exposure to violence affect reciprocity? Experimental evidence from the West Bank

Daniel Zizzo
Newcastle University

ABSTRACT:

Violent conflict is often a dynamic situation where the onset of conflict depends crucially on the response to the first attack. If the tendency of a victim of violence is to respond to aggression with aggression, it is possible that conflict begets more conflict. On the other hand, exposure to violence may detract other people from engaging into violence. The extent to which people affected by violence reciprocate other people's actions is a matter of great interest for peace and conflict resolution, but underappreciated. This paper is concerned with how positive and negative reciprocity is affected by exposure to violence in early age. Using an experimental methodology and lab-in-the-field experiments, we study how conditional cooperation (positive reciprocity) and vindictive behavior (negative reciprocity) in adolescents vary as a result of exposure to violence. We focus on young Palestinians in the West Bank region of the Palestinian Territories. To elicit conditional cooperation, we implement a 'public good game' eliciting unconditional and conditional contributions (Fischbacher et al, 2001). To elicit negative reciprocity, we implement a decision task in which retaliatory behavior can, but need not, occur. This is a simplified form of the vendetta game developed by Bolle et al. (2014). One challenge in the analysis of the effect of violence on these attitudes is that violence may be more likely to occur in places where people are less cooperative already. To solve this issue, we employ an IV strategy based on the location of Israeli settlements pre-dating the first episode of widespread violence against Palestinians (the First Intifada). This strategy allows us to create exogenous variation in the exposure to violence. Our main sample includes 1,000 students in 20 pairs of schools, one in each pair located in an area of high exposure to violence (treatment) and one in an area with low exposure to violence (control). Our preliminary analysis shows that, on average, there are significantly more attackers in the retaliation game in treatment areas than control areas. We have some initial evidence that in areas with high violence there is significant correlation between reciprocity in the public good game and 'negative' reciprocity in the retaliation game. One of the mechanisms through which violence may impact the degree of reciprocity is through an effect on beliefs about what other people would do in general. To test the importance of this mechanism, we introduce an additional treatment: we elicited the subject's expectations about other participants' behavior before their decisions in the
An eye for an eye, a study of negative reciprocity. Evidence from a game show.

Natalia Starzykowska
University of Warsaw

ABSTRACT:
Homo Reciprocans is a term that defines in literature an individual that rewards positive behaviors ('positive reciprocity') and sanctions negative behaviors (negative reciprocity) of other individuals. In work environments requiring teamwork, an employer may prefer individuals who demonstrate this type of attitude. Presence of social rewards and punishments can serve to strengthen the group's common value system. In addition, the awareness of the presence of sanctions corresponding to undesirable behavior may reduce the risk of its occurrence. Unfortunately, based on data from the labor market, it is impossible to investigate whether there are any characteristics (such as gender, education or size of the city of origin) that increase the likelihood of presence of desirable behaviors. The research is an attempt to analyze the tendency to take a revenge revealed by participants of television game show 'Ten to One' and it is linked to gender, education, and demographic characteristics of a player. Decisions in the game consist on nominations of the participant who will answer next question. Since this reduces ones probability of winning the episode, nomination of player who has previously nominated the decision maker can be considered as a negative reciprocity or simply: revenge. Because in some labor market conditions, the presence of described attitudes might be significant, it is useful to know the relationship between the characteristics of individuals and the probability of these behaviors. Up to authors best knowledge, this is the first study of negative reciprocity based on such design of the game. In addition, it seems that this is the first project of its kind made on Polish data. The time horizon of the sample may also allow for an attempt to identify changes in the abovementioned behavior over the past 25 years, which may be particularly interesting from an interdisciplinary perspective. The usage of game show data allows for a much larger and more diversified sample than the one available in the lab. The greater heterogeneity of the sample is evident especially in terms of age, occupational status and education. Thanks to the systematic gameplay and its clear rules, decisions made by players are easily observable and quantifiable. In addition, the researcher has full knowledge of the information on which these decisions have been taken. What's more, the stake for which contestants compete in the trivia game show is much higher than what is achievable in the lab, which is an added value from the perspective of increasing the knowledge of the factors driving the individuals' decisions. In the database of decisions made by participants in the game show 117 episodes have been collected so far, which translates into over 6000 decisions made by players. Collected episodes have been aired between 1994 and 2015. It is a novel database, which have not been shared anywhere so far.
made collectively by committees or parliaments. This paper addresses the question: how does voting institutions affect the strategic incentives of committees to vote for ethical alternatives. We model the problem of a committee who needs to vote on decisions where members face two different incentives. On the one hand, there is an intrinsic motivation: 'warm glow' utility for 'having done the right thing' (i.e. private benefit from voting for an ethical alternative regardless of whether it is adopted). On the other hand, a member may be afraid that this will cause the ethical alternative to win the vote, imposing a cost on her. The latter consideration, however, depends on the probability that the agent is pivotal. Hence, the size of the voting body, as well as the voting rule, should to have an effect on equilibrium behavior. We study two different voting institutions: majority and unanimity voting rules under both, small and large committees. In small committees, we find that under unanimity rule, the larger the group, the more likely is that an individual will vote for the ethical alternative. Also, the group will be more likely to choose the ethical alternative as its size increases. In large groups, the probability that an agent votes for the ethical alternative equals the minimum share of voters necessary for the ethical alternative to be selected and is independent on the cost imposed on her. We test the main theoretical result in a laboratory setting within a charitable donation framing. In line with theoretical predictions, we find that the approval threshold, in proportion of voters, required to pass the ethical decision; and the chances of being pivotal in the election, affect individuals likelihood of voting to donate to a charity. However, incentives of committees to vote for donating departs from theoretical predictions mainly affected by social efficiency considerations.

Author(s): Boris Ginzburg, Jose-Alberto Guerra, Warn N. Lekhuangfu


Back to session: Voting Behavior and Bargaining

### Responsible Majorities? Partisan Composition and Expressive Voting

Peter Matthews
Middlebury College

ABSTRACT:

There are at least two important channels through which the composition of the voting pool could influence partisan expression. The first is the 'benefits effect': as the number of like-minded partisans increase, the perceived benefits of a correct or consequentialist vote could increase. The second, or 'audience effect,' operates in the opposite direction: the benefits of expressive behavior could increase with group size. We present the results of an experiment that measures their relative sizes, and discuss possible implications.

Author(s): Andrea Robbett and Peter Hans Matthews (*)

Topic: Public Choice: Voting and Rent Seeking, Social Behavior: Other-regarding Preferences

Back to session: Voting Behavior and Bargaining

### Does the obligation to bargain make you stick on your guns? An experimental analysis

Jean-Christian Tisserand
UniDistance Lausanne

ABSTRACT:

In a lot of real-life legal disputes, the parties have the obligation to negotiate before an external solution is imposed to them. We investigate theoretically and experimentally the impact of such a constraint on the behavior of bargainers and on the outcome of this bargaining. Individuals initially choose whether to bargain over the division of a pie, and then the bargaining may be imposed to them with some probability. We show that individuals who are forced to bargain are significantly more aggressive than those who initially choose to bargain, and this behavior is indeed partly due to the constraint. This implies that the fact to be constrained does not bring individuals to behave as if they had freely made this decision, which proves that the way the bargaining process is enforced is not neutral, and affects the outcome of this process. This feature should be taken into account for the design of legal procedures of resolution of individual and
NOTAble differences in voting behaviour

Anita Zednik
WU Wien

ABSTRACT:

We study the impact of an explicit None of the Above (NOTA) option on the ballot on voting behaviour in an election environment. Voting NOTA is an expression of dissatisfaction and can be interpreted as a more salient blank vote. In most countries in the Western world, blank votes are counted alongside spoiled votes, which makes deliberately blanking or spoiling a vote a rather noisy signal of dissatisfaction. The relevance of this research is three-fold: firstly, the inability to spoil or blank an electronic ballot raises the question whether one should allow for an explicit NOTA vote in electronic voting systems. For example, in India in 2013, the Indian Supreme Court mandated that an explicit NOTA option needs to be offered on the ballot in all elections. Secondly, it is efficient to allow for options that reflect voters' preferences correctly. Thirdly, our research investigates whether a NOTA option would raise voter turnout. We conducted two survey experiments online right before Presidential Elections were held in two countries: US and Austria. We find that introducing a NOTA option on the ballot increases voter turnout by 2 to 4 percent, but election results do not change significantly. A greater sense of frustration and feeling less informed are correlated with NOTA voting.

Author(s): Attila Ambrus, Ben Greiner, Anita Zednik
Topic: Public Choice: Voting and Rent Seeking, N/A

Back to session: Voting Behavior and Bargaining