Research in Experimental Economics
Volume 19

Experiments in Organizational Economics

Sebastian J. Goerg
John R. Hamman
Editors

Emerald

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Experimental economics has become a well-established tool in the economist's toolbox. Much early experimental work focused on markets – namely the interaction between individuals and between organizations – but it has seen increasing impact in studying behavior *within* organizations. Naturally, Organizational Economics benefits from empirical, experimental, and theoretical insights generated by many fields within and outside economics. Thus, research relevant to Organizational Economics is published in outlets addressing very diverse audiences. This volume of *Research in Experimental Economics* provides a unique chance to publish an abundant set of papers relevant to Organizational Economics in one place.

In this volume we present research in many areas central to organizational economics: communication, governance, endogeneity, incentive systems, and spillovers. Communication technologies within an organization play an important role in both organizational and individual performance. In not-for-profit organizations, self-regulation and self-governance are topics of rising importance in policy debate. Another topic garnering much recent attention is endogeneity within organizations and we present work examining this self-selection and its effects on incentive schemes as well as social interaction within one's workgroup. We conclude with two classic topics in organizational economics: incentives and team productivity, as well as an overview of spillover effects and peer effects in empirical research.

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EXPERIMENTS IN ORGANIZATIONAL ECONOMICS

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INTRODUCTION: EXPERIMENTS IN ORGANIZATIONAL ECONOMICS

Organizational Economics is a relatively new field in economics that seeks to improve our understanding of how institutions themselves shape individual behavior and economic outcomes. In their *Handbook of Organizational Economics*, Gibbons and Roberts define the field as involving "the use of economic logic and methods to understand the existence, nature, design, and performance of organizations, especially managed ones" (Gibbons & Roberts, 2012, p. 1).

Given the extent to which economic activity is channeled through organizations, it is of critical importance to understand better how features of such organizations can affect – and be affected by – decisions of individuals within the organization. How can incentive systems improve effort and performance? What features of organizational structure lead to more productive workers? How do these two elements interact with each other? These are just some of the questions at the heart of organizational economics.

Experimental economics has become a well-established tool in the economist's toolbox. Much early experimental work focused on markets – namely, the interaction between individuals and between organizations – but it has seen increasing impact in studying behavior *within* organizations. The *Handbook of Organizational Economics* includes a chapter by Colin Camerer and Roberto Weber on "Experimental Organizational Economics" summarizing the current state of the literature. Naturally Organizational Economics benefits from empirical, experimental, and theoretical insights generated in Applied Microeconomics in general and more specifically in fields like Personnel Economics, Law and Economics, Industrial Organization, and many more within and outside economics. Thus, research relevant to Organizational Economics is usually published in outlets addressing very diverse audiences. This nineteenth volume of *Research in Experimental Economics* provides a unique chance to publish an abundant set of papers relevant to Organizational Economics in one place.

In this volume we present research in many areas central to organizational economics: communication, governance, endogeneity, incentive systems, and spillovers. Communication technologies within an organization

play an important role in both organizational and individual performance. In not-for-profit organizations, self-regulation and self-governance are topics of rising importance in policy debate. Another topic garnering much recent attention is endogeneity within organizations. We present work examining this self-selection and its effects on incentive schemes as well as social interaction within one's workgroup. We conclude with two classic topics in organizational economics; incentives and team productivity, as well as an overview of spillover effects and peer effects in empirical research.

COMMUNICATION WITHIN ORGANIZATIONS

The first two articles focus on the role of communication in organizations. *The Effect of Structured Emotion Expression on Reciprocity in Bilateral Gift Exchange* by David J. Cooper and John P. Lightle, investigates the effect of emotion expression as a means to Pareto-improving outcomes in hierarchical relationships. In a bilateral gift-exchange game, employees are able to comment on the wages assigned by their matched managers. Employees use structured communication to express gratitude or disapproval of the received wage. However, these messages function not as a substitute for reciprocity through higher effort levels commonly seen in this environment. The relationship between wages and effort is not changed by the introduction of communication, suggesting that subjects consider the messages as a way to express their emotions but not to monetarily punish or reward the managers. While the wage-effort relationship is unchanged, managers' individual wage offers are still affected by the messages.

The next paper, *Cheap Talk Games: Comparing Direct and Simplified Replications* by Fu-Wen Hsieh and Joseph Tao-yi Wang, investigates strategic information transmission in organizations. The authors experimentally test two sender-receiver games, one with 3 states and one with 5 states. A perfectly informed sender advises an uninformed receiver to choose an action. However, the sender has incentives to exaggerate the true state, capturing a common tension between management and employees. Data from the 5-state game replicates the overcommunication observed by Wang, Spezio, and Camerer (2010). Senders reveal more information about the true state than predicted by equilibrium. Based on the communication subjects can be classified in various level-k types. In the simplified communication environment with three states, senders are more frequently

classified as level-2 types and, thus, behavior is closer to the equilibrium prediction in this version of the game.

THE NOT-FOR-PROFIT SECTOR

The following two papers address organizational oversight in the not-for-profit sector. Jade Wong, Andreas Ortmann, Alberto Motta, and Le Zhang investigate in *Understanding Social Impact Bonds and Their Alternatives: An Experimental Investigation* how to overcome inefficiencies of social programs by via outside investment. The idea behind social impact bonds (SIBs) is that a private investor who is willing to invest in a social cause earns the social returns of the project. The outside investor may be better equipped to obtain accurate information with which to monitor the not-for-profit's performance. In the paper, SIBs are experimentally compared to a piece rate mechanism and a non-binding bonus mechanism – two contracts that allow for motives of reciprocity. In contrast to these contracts, the SIB is fully enforceable. Despite the potential lack of reciprocity, the SIB outperforms the other two contract types.

In *Self-Regulatory Organizations Under the Shadow Of Governmental Oversight: An Experimental Investigation* Silvester Van Koten and Andreas Ortmann test self-regulatory organizations (SROs). SROs are seen in education, healthcare, accounting, finance, and legal services. The authors base their experiment on the model by DeMarzo, Fishman, and Hagerty (2005), which demonstrates that SROs can obtain monopoly power and that (costly) governmental oversight, even if not fully efficient, can offset this market power. The underlying argument is that the mere threat of government oversight provides the incentives necessary for SROs to regulate. This prediction of a second-best outcome finds support in the data.

GROUP IDENTITY AND SOCIALIZATION

The next set of papers investigates how the affiliation to groups or organizations influences behavior; either directly through group identity or over time through socialization. In *Does Group Identity Prevent Inefficient Investment in Outside Options? An Experimental Investigation* Hodaka Morita and Maroš Servátka investigate how group identity can help to mitigate the problem of hold-ups and quasi-rents resulting from

relationship-specific investments. Previous research shows that group identity increases the altruistic preferences towards group members (Chen & Li, 2009). Based on the revealed altruism theory of Cox, Friedman, and Sadiraj (2008) this change in social preferences should then reduce the trade partner's incentives for opportunistic behavior. The experimental results have failed to support this conjecture, in contrast to the findings by Morita and Servátka (2013) that group identity reduces distortions in ex-ante efficient relation-specific investment.

Recent research shows that prosocial organizations tend to have more prosocial employees. Previous studies provide evidence that this difference in employees is at least partly due to selection (Banuri & Keefer, 2016; Serra, Serneels, & Barr, 2011) as organizations and governments attract workers who share their general orientation and objectives. Sheheryar Banuri and Philip Keefer investigate in *Mellowing with Tenure? Socialization Increases Prosocial Behavior in Public Organizations* how, in addition to selection, socialization may cause more prosocial behavior within prosocial organizations. In a sample of nearly 300 Indonesian public officials the authors measure charitable giving to the Indonesian Red Cross. Their results suggest that longer tenure in a public organization can actually increase prosocial behavior, as subject's charitable giving increases with tenure in the public sector.

EMPLOYEES' SELF-SELECTION

The following two articles continue the thread of self-selection by examining employees' self-selection into contracts. The first paper, *Enhancing Autonomy to Motivate Effort: An Experiment on the Delegation of Contract Choice* by Shereen J. Chaudhry and David Klinowski investigates the potential effects of autonomy on workers' intrinsic motivation. Previous research has argued that more autonomy at the workplace may increase workers' effort (Handel & Levine, 2004) while too much control can decrease workers' output (Falk & Kosfeld, 2006). This paper explores whether the delegation of a contract choice from a principal to a worker can incentivize agents' productivity. In their experiment a principal can either choose the contract under which a worker performs a real-effort task, or delegate the contract choice to the worker. The data fails to confirm the hypothesis that workers exert more effort if the contract is

endogenously chosen. No performance differences are observed in the conditions with and without choice autonomy.

Recently, more attention has been paid to the individual characteristics that drive selection into different incentive schemes (Larkin & Leider, 2012). Fanzheng Yang advances this research in *The Effects of Compensation Schemes and Performance Feedback on Employee's Self-Selection: An Experimental Investigation.* The paper investigates how people with heterogonous characteristics select into different compensation schemes using a broad menu of options. Participants perform a real-effort task and can ultimately choose between firms that offer piece rates, revenue sharing, individual tournaments, and team tournaments as incentive schemes. Participants with high ability tend to prefer individual tournaments, while risk-averse participants are less likely to choose competitive payment schemes. Similarly, women tend to avoid payment scheme based on individual tournaments. Interestingly, this self-selection can be influenced: Providing feedback on the relative performance helps to de-bias beliefs about one's own performance.

INCENTIVES AND PRODUCTIVITY

The subsequent set of papers covers the effects of individual and team incentives on effort and productivity. The effects of pay-for-performance have been widely studied in the field (Lazear, 2000) and in experiments (Cadsby, Fei Song, & Tapon, 2007). However, these studies usually focus on average effects for the studied population. In *The Impact of Risk Aversion and Stress on the Incentive Effect of Performance Pay* by C. Bram Cadsby, Fei Song, and Francis Tapon, the focus is shifted to how individual characteristics impact the effectiveness of monetary incentives. The authors demonstrate that the effectiveness of pay-for-performance is inversely correlated with risk-aversion. Roughly a sixth of the participants do not improve their performance in a simple arithmetic task when payments are performance based. In fact performances can actually drop with increased risk aversion. In addition, more risk-averse participants show a greater increase in stress when moving from fixed payment scheme to pay-for-performance scheme than less risk-averse participant. However, more risk-averse participants perform better with a fixed payment scheme and therefore have less room to improve when payments are contingent on performances.

The organizational literature is full of free-riding problems that occur in team environments where payoffs depend on the joint output or joint success. Only recently has the focus shifted to free-riding incentives in dynamic contexts like research teams or R&D joint ventures. In such environments free-riding incentives can lead to the phenomenon of "rational procrastination" – the strategic delay of effort (Bonatti & Hörner, 2011; Weinschenk, 2011). In *Do Teams Procrastinate? Strategic Procrastination in a Dynamic Environment* Sebastian J. Goerg, Sebastian Kube, Jonas Radbruch, and Philipp Weinschenk try to identify strategic procrastination in laboratory team experiments. In two-person teams, players work for a finite number of periods on a joint project for which the success probability depends on the joint effort of both members. In the experiment, workers respond to the implemented effort of the matched worker and in some circumstances these effort decisions resemble the pattern of rational procrastination. However, the overall results from three different treatments suggest that these patterns are caused by other-regarding concerns rather than the strategic motives of the rational procrastination models.

SPILLOVERS

In *Behavioral Spillovers in Organizations A Selective Review* Miguel A. Martínez-Carrasco provides a selective overview and categorization of the experimental and empirical literature. The paper discusses behavioral spillovers based on technological characteristics (e.g., production, incentives, and information) as well as peer effects stemming from social interaction (e.g., presence and interaction with other workers) and social preferences of organization members.

CORRIGENDUM

This volume of *Research in Experimental Economics* then concludes with a Corrigendum for the article *Four Classic Public Goods Experiments: A Replication Study* by Catherine C. Eckel, Haley Harwell, and José Castillo published in Volume 18.

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