Can Urgun

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Personal Information

Citizenship: Turkey

Research and Teaching Fields

Research Fields: Microeconomic Theory, Game Theory and Applied Microeconomics.
Teaching Fields: Microeconomics, Game Theory, Probability.

Education

Ph.D. Managerial Economics and Strategy, Northwestern University,	2017(Expected)
M.S. Managerial Economics and Strategy, Northwestern University,	2012
M.A. Economics, Sabanci University,	2011
B.A. Economics, *Minor in Mathematics*, Sabanci University,	2009

Fellowships and Awards

1. Turkish Scientific and Technological Research Council (TUBITAK) Master's scholarship
2. Sabanci University MA Scholarship
3. Sabanci University UG Honor Scholarship and Extraordinary Success Award

Teaching Experience

1. Teaching Assistant, Kellogg School of Management, 2012-2015
   Game Theory, Executive MBA Elective
   Game Theory and Strategic Decisions, Part-Time MBA
   Strategy and Organization, MBA
2. Teaching Assistant, Sabanci University, 2008-2011
   Games and Strategy, Undergraduate
   Game Theory, Undergraduate
   Advanced Microeconomics, Undergraduate
   Microeconomics, Undergraduate
   Industrial Organization, Undergraduate

Research Experience

1. Research Assistant to Professor Niko Matouschek, 2015
2. Research Assistant to Professor Alvaro Sandroni, 2013, 2014, 2015
3. Research Assistant to Professor Jin Li, 2013

Job Market Paper

Contract Manufacturing Relationships

> Contract manufacturing enables intellectual property holders to enjoy scale economies, reduce labor costs and free up capital. However, in many scenarios contract manufacturing is a double-edged sword, rife with entrenchments, threats of predation or hold up. I explore these contract manufacturing problems in a non-recursive relational contract setting. These non-recursivities appear in at least two scenarios: First, a setting where there is learning by doing, but the accumulated expertise can also be used by the agent to compete against the principal. Second, a setting where there are multiple potential producers, but these contract manufacturers have prior entrenchments effecting their costs and can hold up the client. The analysis of these relations requires a novel methodological approach. A key contribution is that despite the non-recursive nature of these relationships, in both settings the principal optimal contract is characterized by a simple index rule, which does not depend on history or other agents.

Other Papers and Works in Progress

When to Confront: The Role of Patience (with Alvaro Sandroni) (R&R at AEJ: Microeconomics)

> This paper examines the effects of patience on ordinary conflicts such as divorce, price wars and commercial litigation. Players optimally decide when, if ever, to start a destructive confrontation. In the unique equilibrium, there is a tight connection between patience, aggressiveness and strength. In particular patience may lead to immediate confrontation (the most inefficient outcome). This inefficiency is caused by preemptive moves that deny option values to the opponent.

Dynamics in Art of War (with Alvaro Sandroni) (Conditionally Accepted at Mathematical Social Sciences)

> This paper examines basic principles in Sun Tzu's classic treatise Art of War. In a dynamic decision-theoretic model, there is a potential conflict and each side optimally decide when to start the actual confrontation. The comparative statics results show precise conditions under which the principles of strategic fighting in Art of War hold.

Costly Inspection and Money Burning in Internal Capital Markets (with Rohit Patel) (R&R at Theoretical Economics)

> Bureaucracy and influence activities consume a great deal of managers' time and effort in an organization. These activities are surplus destroying in the sense that they produce no direct output or information. This paper suggests a positive role for these activities. We develop a model for allocation in internal capital markets that takes a mechanism design perspective and incorporates both costly inspection and money burning (e.g. bureaucracy, influence activities) as tools for the headquarters to pursue optimal allocations. We find that the optimal mechanism deploys both the instruments of costly inspection and money burning, often at the same time on an agent.

The Operational Challenges of Sharing-Economies: An Optimal Re-balancing Mechanism for the Bike-Sharing Industry (with Pantelis Loupos) (Finalist at Doing Good with Good OR)

> Bike-sharing programs have been gathering momentum, but their expansion poses several operational challenges. We propose a novel solution to the bike re-balancing problem, that is centered around the actions of the riders instead of solely utilizing re-balancing trucks. We have built an algorithm that can make real-time recommendations for bike drop-off locations based on the: (1) the fill-levels of docking stations, (2) the popularity of stations, as calculated from historic inflow and outflow traffic, and (3) the most common detours a rider takes if his/her desired station is full. The advantage of such an approach is twofold: first, riders can find spots to lock-up their bikes more easily, and second, fill levels of stations can be controlled more efficiently without the constant intervention from the BSP. We believe that its adoption by bike-sharing operators could have a positive impact on the industry.

Favoritism in Relational Contracts

> I study a relational contracting problem where there are two agents and a principal. The principal has a bad reputation for favoring one of the agents, that is worsened by presence of private monitoring and different discount factors. Under this non-recursive, highly asymmetric setting I construct an equilibrium that achieves the principal optimal outcome if the unfavored agent is patient enough.

Stochastic Discounting in Repeated Games (with Mehmet Barlo)

> We study repeated games with pure strategies and stochastic discounting under perfect information, with the requirement that the stage game has at least one pure Nash action profile. Players discount future payoffs with a common, but stochastic, discount factor where associated stochastic discounting processes are required to satisfy Markov property, martingale property, having bounded increments, and possessing state spaces with rich ergodic subsets. We, additionally, demand that there are states resulting in discount factors arbitrarily close to 0, and that they are reachable with positive (yet, possibly arbitrarily small) probability in the long run. In this setting, we prove both the perfect Folk Theorem and our main result: The occurrence of any finite number of consecutive repetitions of the period Nash action profile, must almost surely happen within a finite time window no matter which subgame perfect equilibrium strategy is considered and no matter how high the initial discount factor is.

Making Recommendations Smarter: An Inventory Management Approach (with Pantelis Loupos)

> Recommendations have become a critical business tool in E-commerce. The recommendation engines typically rely on data analytics algorithms that analyze previous user trends and ratings in order to match similar customers and make personalized recommendations. In this paper, we examine the potential upside of taking into account inventory information when proposing deals.

Languages

English (fluent), Turkish (native)

References

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