

Elia Sartori

Foscolo Europe Research Fellow, Università degli Studi di Napoli Federico II and CSEF

January 2020

Contact Information

Center for Studies in Economics and Finance,
Department of Economics and Statistics,
University of Naples Federico II
Via Cintia, 80122 Naples (NA), Italy
Ph: +39 349-4038510
e-mail: elia.sartori@unina.it
Website: <https://sites.google.com/view/elia-sartori/home>

Current Position

2019-present: "Foscolo Europe" research fellow at CSEF

Education

2019 PhD in Economics, Princeton
2016 M.A. in Economics, Princeton
2014 M.Sc. in Economics and Social Sciences, Bocconi
2012 Bachelor in Economics, Major in Finance, Bocconi

Academic References

Stephen Morris (Dissertation Chair), M.I.T.,	semorris@mit.edu
Faruk Gul, Princeton University	fgul@princeton.edu
Wolfgang Pesendorfer, Princeton University	pesendor@princeton.edu

Research Fields

Primary: Applied Microeconomic Theory, Information Economics
Secondary: Labor Economics

Honors

2019-present	Unicredit Foscolo Europe Research Fellow
Summer 2018	Goldfeld Summer Fellowship
Summer 2017	DETC Summer Grant, Princeton University
2015-2017	Bank of Italy "Bonaldo Stringher" scholarship
2012-2014	Bocconi Graduate Merit Award
2009	"Abbreviazione per merito", high school career shortened by one year

Teaching Experience

Fall 2019: Instructor, Microeconomic Theory I and II PhD at Università di Napoli Federico II
Summer 2018: Instructor, JSI Adv. Micro, Woodrow Wilson School of Politics, Princeton
Spring 2018: TA in ECO502 Microeconomic Theory II (Graduate), Princeton
Fall 2017: TA in ECO362 Financial Investment (Undergrad), Princeton
Spring 2017: TA in ECO310 Mathematical Microeconomics (Undergrad), Princeton
Fall 2016: TA in ECO310 Mathematical Microeconomics (Undergrad), Princeton

Working papers

Competitive Provision of Digital Goods

Digital goods are produced along a quality ranking and can be both duplicated and damaged at zero marginal cost. Valuation of quality consists of a common concave component and a heterogeneous component that gives sellers a motive for screening. The monopolist problem is naturally divided into an acquisition and a distribution stage; two interdependent sources of inefficiency (underprovision and quality damaging) emerge. Competition is modeled as a two stage game of perfect information, in which active firms acquire market power through an irreversible investment in quality. The monopolistic allocation emerges as one equilibrium but there are also equilibria with active competition. The welfare comparison between monopoly and duopoly is ambiguous: additional competitive underacquisition and double spending favor the former, undoing damaging inefficiencies by distributing a positive quality for free favors the latter.

Stationary price Incentivation into Treatment: Control and Estimation

We associate each multiarmed bandit problem to an uncertainty function (in the sense of De Groot, 1962) so that the implied information function is traded-off one for one with expected utility at each belief state to determine the optimal policy. In the main application we model policymaking as a bandit problem where the arms are treatment incentive schemes (BDM mechanisms) whose payoff value and correlation is disciplined by an economic theory. The associated uncertainty function identifies the set of decision relevant parameters and quantifies the estimation content of selection mechanisms. A regime is a collection of "similar" mechanisms that map models onto the proportion of treated (propensity score): fully coercive (RCT) and fully voluntary (posted price) schemes are extreme examples. To each regime and reduced form model is associated a distortion function which tilts the RCT (identity) map from the propensity score into the average treatment effect. We propose a sampling procedure that (epsilon) validly implements all BDM mechanisms while minimizing the variance of the empirical propensity score and preserving information continuity. Fully voluntary mechanisms are control optimal under linear preferences, but their valid implementation induces the largest variance of the sample size used for estimation, which is undesirable.

Screening for Susceptibility and Influence (with Franz Ostrizek, Princeton)

We study a monopolist screening problem with network externalities in consumption and two dimensions of unobserved heterogeneity. The monopolist screens only along one dimension (susceptibility to neighbors' consumption) while "tilting" allocations along the other (influence on neighbors' consumption) to provide a consumption externality. The optimal allocation satisfies a "lexicographic monotonicity" condition: since higher aggregate consumption increases total surplus the optimal allocation is tilted towards providing influential consumers with high consumption. Consumers, however, do not benefit from being influential in the network.

Firm Heterogeneity, Wage Rigidity, and the Labor Market (with Michele Fornino, M.I.T.)

We present a wage posting model with search frictions where idiosyncratic shocks to optimal firm size generate different returns to adjusting the workforce. Firms are the only decision makers and operate in a rigid contractual environment where the cost of changing an employment relationship is exogenous. Labor market outcomes are modeled as a mean field game equilibrium in which aggregate statistics impacting firms' policies, which play the role of prices, are the hiring and poaching flow rates. Consistency of aggregate choices with prices builds on a reduced form matching function which subsumes the entire functioning of the labor market outside of firms. The model delivers nontrivial policy functions and aggregates, which can be used to quantify features of the endogenous reshuffling of workers both in the size ladder and in the wage ladder, including net poaching along these two margins, as presented in, e.g., Haltiwanger et al. (2017). A calibrated version of the model is able to generate an inverted net poaching schedule which is consistent with their finding that smaller firms poach workers from larger ones.

Optimal Transparency with Behavioral Types (with Franz Ostrizek, Princeton)

This paper studies the effectiveness of market transparency (i.e. precision of signals about aggregate outcomes such as prices and trading volumes) as a policy tool to increase total informativeness of markets (efficiency). A motivating example is the enactment of the MiFid regulation for OTC markets. Since market informativeness is endogenous, the positive direct effects must be traded off with a curse from transparency that discourages private information acquisition. We show that when agents are fully rational transparency has no impact on efficiency under linear acquisition costs, and it decreases efficiency if such costs are concave (e.g. entropy). Motivated by large evidence suggesting departure from the fully rational model we specify variants of the model that allow agents to display behavioral biases in parsing information from the aggregate action. When agents fail to recognize they are playing an equilibrium and treat the state and aggregate action as independent variables the crowding out effect is completely shut down and transparency is effective in increasing efficiency.

Work in progress

Exploration, Exploitation and Accumulation Infotainment

Normative Uncertainty, Introspection and Political Behavior (with Brian Jabarian, SciencePo)

Information Indexed Secondary Markets for (Semi-)Durable Goods (with Nicola Rosaia, Harvard)