

Nemanja Antić

Contact Information

MEDS Department
Kellogg School of Management
2001 Sheridan Road
Evanston, IL 60611

www.kellogg.northwestern.edu/faculty/antic/
nemanja.antic@kellogg.northwestern.edu
(609) 375 6144
Citizenship: Australian

Employment

Assistant Professor and Donald P. Jacobs Scholar, 2016 to Present
Department of Managerial Economics and Decision Sciences, Kellogg School of Management

Visiting Assistant Professor and Postdoctoral Fellow, 2015 to 2016
Department of Managerial Economics and Decision Sciences, Kellogg School of Management

Education

Ph.D. in Economics, Princeton University, 2010 to 2015
Committee Chair: Professor Stephen Morris

M.A. in Economics, Princeton University, 2012
M.Sc. in Mathematics, Australian National University, 2010
B.Bus. in Economics (1st Class Honours), Queensland University of Technology, 2007

Fields of Interest

Microeconomic Theory, Political Economy, Mechanism Design, Repeated Games, Bargaining

Working Papers

Communication among Investors, with Nicola Persico

Abstract: This paper studies information transmission among shareholders in an investment venture. An expert shareholder, such as an especially knowledgeable active investor, chooses how much information to communicate to a controlling investor who controls the investment strategy. The incentives that drive communication are determined by the amounts of shares held by the expert and controlling investors: different shareholding configurations affect information transmission within the

venture. In addition, we discuss how different share-allocation mechanisms impact information transmission and, through it, welfare. If shares are allocated through a market mechanism, there is a tendency to achieve a welfare-maximal allocation: perfect communication and full risk-sharing. When frictions lead to a welfare-suboptimal outcome, a competitive market for shares fails to reward the positive externalities that an informed investor provides to other investors by purchasing shares. Within a principal--agent setting, the model highlights a trade-off between incentivizing effort provision and promoting information transmission. Also, the model delivers insights about the effects of prudential regulation.

Screening through Coordination, with Kai Steverson

Abstract: A principal decides whether or not to take an action on each of a number of agents without the use of transfers. Each agent always desires the action to be taken and has private information (his type) about the principal's payoff from taking the action on him. In a typical screening problem, the principal tailors her action to the preferences associated with the reported types of the agents. Such tailoring is impossible here since the agents' preferences are independent of their type. However, if the principal's payoff exhibits complementarities across the agents, then she can use a mechanism to coordinate her actions on the agents. Coordination involves taking the action on agents with high (low) types more often when the other agents also have high (low) types. Due to complementarities, coordination optimally accepts failure when the consequences are small in order to ensure success when the gain is high. We also find that, in a variety of environments, the action is taken more often for an ex-ante inferior agent, a phenomenon we call favoritism.

A number of economic environments correspond to our setting: a firm downsizing a division and deciding which employees to keep; a CEO deciding whether to include updated components, developed by different divisions, or use components from the previous version of a product; evaluating employees using self-reports about performance; choosing a team from within an organization to work on a new prestigious project; deciding whether to implement separate recommendations from experts working on retainer.

Contracting with Unknown Technologies

Abstract: I study contracting with moral hazard when the agent has available a known ("baseline") production technology but the principal thinks that the agent may also have access to other technologies, and maximizes his worst-case expected utilities under those possible technologies. All Pareto-efficient contracts take the form of

participating preferred equity, a mixture of debt and equity. The nature of the contract depends on the most unproductive (in terms of stochastic dominance) technology that the principal thinks might be available to the agent. As this lower-bound technology becomes worse, the efficient contracts approach equity, generalizing existing work on robust contracting. When the lower-bound technology approaches the baseline technology, efficient contracts approach debt, providing more robust foundations for the textbook financial contracting model.

Underfunding and Overfunding in Agency Relationships: The Scope and Size of Optimal Delegation, with Matias Iaryczower

Abstract: We consider a model of optimal delegation in which a principal and an agent have non-separable preferences over the size and direction of policy (they value an increase in project size more if the policy is closer to their most preferred policy). In order to allow a large space of contracts, we study this problem in a mechanism design setting without transfers. We show that the optimal separating contract involves the principal overfunding the project and distorting policy towards the agent in "low" states, and underfunding the project in high states. The policy distortion in high states depends on the amount of policy conflict between the principal and agent – if conflict is low, policy is distorted in favor of the agent, while if conflict is high, policy is distorted away from the agent and Pareto-dominated outcomes are implemented. We illustrate the implications of the model with an application to Congressional control of the bureaucracy.

Depreciation in Dynamic Contribution Games: A Folk Theorem, with Marco Battaglini

Abstract: The literature on contribution games, where players' level of participation (or their aggregate contribution) is assumed to be monotonic, concludes that efficient outcomes are typically not achievable. We show that these qualitative results are not robust when any non-zero depreciation of contributions is assumed: we prove a folk theorem in this setting and thus show efficient public good provision is possible. Inspired by public good provision, we generalize these games to allow for a more general payoff-relevant state. We show that in the more general environment our observations hold: with zero depreciation efficient outcomes are not achievable, but a folk theorem holds with any positive level of depreciation.

Published Papers (Undergraduate Work)

Can collapsing business networks explain economic downturns?, with Paul Frijters

Economic Modelling, 2016, Volume 54, p 289-308

Mirror, mirror on the wall, who is the happiest of them all? with Uwe Dulleck and Benno Torgler
Kyklos, 2008, Volume 61, Issue 2

Research in Progress

Fairness and Dynamic Pricing, with Yuval Salant

Optimal Banking and Deposit Insurance with Delegated Monitoring, with Tai-Wei Hu
Presented in Northwestern Theory Lunch, early draft available on request

Bargaining with Private Deadlines, with Juha Tolvanen
Presented in Princeton Microeconomic Theory Lunch, draft available on request

Approximate Design of Optimal Mechanisms
Presented in Princeton Microeconomic Theory Student Lunch

Teaching Experience

2016-	MECN430 Microeconomic Analysis (Kellogg)
2012-2015	Intermediate Microeconomics: A mathematical approach (Princeton)
2012-2014	Junior Independent Work (Princeton)
2011-2013	Summer Math Camp Instructor for Woodrow Wilson School (Princeton)
2008-2009	Public Economics, Calculus, Advanced Calculus, Linear Algebra I and II (ANU)
2004-2007	Introduction to Microeconomics, Business Statistics, Econometrics (QUT)

Presentations

Cornell (2014), Princeton (2015), Northwestern Kellogg (2015), Chicago Booth (2015), Vanderbilt (2015), Rochester (2015), Bocconi (2015), Boston University (2015), EIEF (2015), Northwestern Theory Lunch (2016), KTED at Kellogg (2016), Michigan (2016), European Meeting of the Econometric Society in Geneva (2016), Ninth Transatlantic Theory Workshop in Oxford (2016), University of Calgary (2016), University of Queensland (2016), New York University (2017)

Referee

American Economic Review, Econometrica, Games and Economic Behavior, Journal of Economic Dynamics and Control, Journal of Economic Theory, Journal of Mathematical Economics, Theoretical Economics

Honors, Scholarships, and Fellowships

2010-2015	Graduate Student Fellowship and Summer Fellowship, Princeton University
2014	Stephen Goldfeld Memorial Graduate Fellowship
2007	University Medal, QUT
2006	Dean's Academic Excellence Award, QUT (1 st out of ~1500 Undergraduates)
2006	Economic Society of Australia Prize
2003-2006	Corporate Partners in Excellence Scholarship, QUT

References

Professor Stephen Morris
Department of Economics
Princeton University
(609) 258-4032
smorris@princeton.edu

Professor Marco Battaglini
Department of Economics
Cornell University
(607) 255-3052
battaglini@cornell.edu

Professor Sylvain Chassang
Department of Economics
Princeton University
(609) 258-4847
chassang@princeton.edu

Last Updated: November 2016