

Daniel Krähmer



Academic career

1998	Diploma in Mathematics, HU Berlin
1999	Master's Economics, University College London, England, UK
2003	Dr. rer. pol., FU Berlin
2003 - 2004	Postdoctoral Fellow, University College London, England, UK
2004 - 2008	Research Fellow, Institute for Microeconomic Theory, FU Berlin (Research grant SFB/TR 15)
2008 - 2011	Associate Professor of Economics (W2, Bonn Junior Fellow), University of Bonn
Since 2011	Professor of Economics (W3), University of Bonn

Invited Lectures

Seminars

2011	University of Augsburg, University of Mannheim
2012	Carlos III University of Madrid, Paris School of Economics
2013	University of Dortmund, EUI Florence, Yale University, University of Pittsburgh
2014	University of Hamburg, University College London
2015	University of Düsseldorf, Bocconi University
2016	University of Frankfurt, University of Helsinki, University of Tübingen, University of Bielefeld, University of Düsseldorf, University of Mannheim
2017	Toulouse School of Economics, University College London, London School of Economics

Research Projects and Activities

DFG Collaborative Research Center SFB/TR 15 "Governance and the Efficiency of Economic Systems"

Principal Investigator, 2012 – 2015

DFG-Fachkollegiat in the Fachkollegium für Wirtschaftstheorie since 2016

DFG Collaborative Research Center SFB/TR 224 "Economic Perspectives on Societal Challenges: Equality of Opportunity, Market Regulation, and Financial Stability",

Project leader of the project "Consumer protection and competition policy"

Research profile

One of my current research interests is the relation between dynamic and static models of monopolistic screening. While static screening models have been applied in ubiquitous contexts from regulation to public procurement and price discrimination, dynamic models can explain, for example, the widespread use of option contracts in various settings. In the simplest dynamic screening model, there is a single buyer who has private ex ante information in the form of beliefs about his valuation for the good, but (privately) learns his true valuation only ex post, after he has signed the sales contract. We show that this model corresponds literally to the standard principal agent textbook model where the buyer has perfect private information ex ante. Key in establishing the connection between the sequential and the static model is to explicitly allow for the use of stochastic contracts in the static model. Intuitively, stochastic contracts enter the picture, because in the sequential model the terms of trade depend on the buyer's valuation that realizes ex post and are, from an ex ante perspective, therefore stochastic. The equivalence result allows us to provide new results for sequential screening by applying well-known insights from the static screening model.

One of my future research topics will be information design resp. disclosure in mechanism design. In many settings, a designer, e.g. an auctioneer, can provide and fine-tune the extent of payoff-relevant information that agents (bidders) have access to and which refines their private information. In many contexts, a designer cannot fully control the agents' information. One important and natural constraint is that an agent cannot be provided with information about the valuation of the other agents. In other words, the designer cannot affect an agent's first order beliefs about the true valuation of the other agents. A designer can, however, affect an agent's (second order) beliefs about what the other agent believe about their own valuation. E.g., the designer can inform an agent about whether he disclosed more or less precise information to the other agents. To the extent that higher order beliefs crucially affect equilibrium outcomes in mechanisms, I intend to study how a designer improve his objective by designing information disclosure procedures that affect higher order beliefs. This may be done in the context of optimal mechanism design, but also within the context of a given mechanism, such as a first price auction.

Research Area I One of my main research interests are dynamic principal agent models where the agent's private information arrives over time. In [8], we consider situations in which the agent has to acquire new information by himself, and show how information acquisition incentives are distorted under the optimal mechanism. In [4], we study the role of ex post participation constraints that arise in online markets with return rights or when the agent has limited liability, and we show that in this case an optimal contract does not elicit the agent's information sequentially. In [3], we study sequential information disclosure incentives, and in [2], we consider a sequential principal agent problem when monetary transfers are infeasible. I am also interested in the optimal allocation of decision rights in organizations when contracts are incomplete. In [6] and [1], we construct an incomplete contract with exit rights that allows the contracting parties to fully overcome frictions entailed by asymmetric information and contractual incompleteness. In [9], we show that delegating authority to subordinates may actually harm their effort incentives. Finally, I am also interested in auction design when bidder valuations are correlated [7].

Supervised theses

Master theses: 20, currently 4
Diplom theses: 15, currently 4
PhD theses: 4, currently 1

Selected PhD students

Stefan Terstiege (2013): "Essays in Contract Theory",
now Assistant Professor, Maastricht University, Netherlands
Tobias Gamp (2016): "Essays in Behavioral Industrial Organization",
now Postdoc, University College London, UK
Holger Herbst (2016): "Essays on Dynamic Sales and Matching Mechanisms",
now Consultant for McKinsey
Bo Chen (2016): "Essays in Applied Microeconomic Theory",
now Assistant Professor, College of Industrial Management of KFUPM, Saudi Arabia

Selected publications

- [1] Helmut Bester and Daniel Krähmer. The optimal allocation of decision and exit rights in organizations. *RAND Journal of Economics*, 2016.
- [2] Eugen Kováčik and Daniel Krähmer. Optimal sequential delegation. *J. Econom. Theory*, 163:849–888, 2016.
- [3] Daniel Krähmer and Roland Strausz. Ex post information rents in sequential screening. *Games Econom. Behav.*, 90:257–273, 2015.
- [4] Daniel Krähmer and Roland Strausz. Optimal sales contracts with withdrawal rights. *Rev. Econ. Stud.*, 82(2):762–790, 2015.
- [5] Tilman Börgers, Angel Hernando-Veciana, and Daniel Krähmer. When are signals complements or substitutes? *J. Econom. Theory*, 148(1):165–195, 2013.

- [6] Helmut Bester and Daniel Krähmer. Exit options in incomplete contracts with asymmetric information. *J. Econom. Theory*, 147(5):1947–1968, 2012.
- [7] Daniel Krähmer. Optimal auction design with endogenously correlated buyer types. *Journal of Economic Theory*, 147:118–141, 2012.
- [8] Daniel Krähmer and Roland Strausz. Optimal procurement contracts with pre-project planning. *The Review of Economic Studies*, 78:1015–1041, 2011.
- [9] Helmut Bester and Daniel Krahmer. Delegation and incentives. *The RAND Journal of Economics*, 39(3):664–682, 2008.
- [10] Daniel Krähmer. Equilibrium learning in simple contests. *Games Econom. Behav.*, 59(1):105–131, 2007.