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EDUCATION

Ph.D. in Economics, Stanford University, Graduate School of Business
        Expected Completion: June 2017

B.A. in Mathematics, University of Warsaw, 2009-2012

B.A. in Economics, Warsaw School of Economics, 2008-2011

DISSERTATION COMMITTEE

Prof. Andrzej Skrzypacz (advisor)
Graduate School of Business, Stanford University
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Prof. Darrell Duffie
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Prof. Michael Ostrovsky
Graduate School of Business, Stanford University
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RESEARCH INTERESTS

Primary fields: Mechanism and Information Design
Secondary fields: Information in Financial Markets, Auctions, Matching

TEACHING EXPERIENCE

2015-16	Guest Lectures in PhD classes, Stanford University, Mgtecon 602, Auctions, Bargaining, and Pricing, Finance 622, Dynamic Asset Pricing Theory, Econ 283, Theory and Practice of Auction Market Design, Econ 290, Multiperson Decision Theory.
2015	Teaching Assistant for Prof. S. Athey, Stanford University, Mgtecon 513 (Platform Competition in Digital Markets, MBA).
	Teaching Assistant for Prof. Y. Feinberg, Stanford University, Mgtecon 330 (Economics of Organization, MBA).
2013-14	Teaching Assistant for Prof. D. Kreps, Stanford University, Mgtecon 600 (Microeconomic Analysis I, PhD).

PROFESSIONAL ACTIVITIES

Referee for *Econometrica, American Economic Review, Journal of Financial Economics, RAND Journal of Economics, Journal of Financial Services Research, EC'17 conference* (program committee member)

Seminar presenter, *Econometric Society Meeting*, Edinburgh, 2016, *15th Annual Columbia/ Duke/ MIT/ Northwestern IO Theory Conference* (short presentation in the Rising Stars Session, JIE Fellow), Evanston, 2016, *The ACM Conference on Economics and Computation (EC'16)*, Maastricht, 2016, *Ce2 Workshop*, Warsaw, 2016, *Econometric Society Meeting*, Milan, 2015, *World Congress of the Econometric Society*, Montreal, 2015, *SED Annual Meeting*, Warsaw, 2015, *Warsaw International Economic Meeting*, Warsaw, 2015, *BGSE Summer Forum*, Barcelona, 2015

Helping design the Polish kidney exchange market

Non-research articles at VOX (CEPR's Policy Portal): *In Support of Transparent Financial Benchmarks*, *Robust Financial Market Benchmarks*

RESEARCH PAPERS

Mechanism Design with Aftermarkets: Cutoff Mechanisms (**Job Market Paper**)

I study a mechanism design problem of allocating a single good to one of several agents. The mechanism is followed by an aftermarket, that is, a post-mechanism game played between the agent who acquired the good and third-party market participants. The designer has preferences over final outcomes, but she cannot redesign the aftermarket. However, she can influence its information structure by disclosing information elicited by the mechanism, subject to providing incentives for agents to report truthfully. I identify a class of allocation and disclosure rules, called cutoff rules, that are implementable regardless of the form of the aftermarket and the underlying distribution of types. A mechanism can be guaranteed to be truthful in all cases *only* if it implements a cutoff rule. Cutoff mechanisms are tractable, and admit an indirect implementation that often makes them easy to use in practice. Sufficient conditions are given for particularly simple designs, e.g. a second-price auction with disclosure of the price, to be optimal within the class of cutoff mechanisms. The theory is illustrated with applications to the design of auctions followed by bargaining or resale markets, and to the optimal level of post-transaction transparency in financial over-the-counter markets.

Mechanism Design with Aftermarkets: On the Optimality of Cutoff Mechanisms

My job market paper introduces a class of cutoff mechanisms, characterizes their properties, and derives the optimal mechanism within the class. In this paper, under the assumption that the aftermarket payoffs are determined by a binary decision of the third party, I provide sufficient conditions for optimality of cutoff mechanisms. I also analyze a version of the model in which cutoff mechanisms are sometimes suboptimal. I derive robust payoff bounds on their performance, and show that by using a cutoff mechanism the designer can often guarantee a large fraction of the payoff of the optimal (non-cutoff) mechanism.

Mechanism Design with Aftermarkets: On the Impossibility of Pure Information Intermediation

A mediator, with no prior information and no control over the market protocol, attempts to redesign the information structure in the market by running an information intermediation mechanism with transfers that first elicits information from an agent, and then discloses information to another market participant (third party). The note establishes a general impossibility result: If the third party has full bargaining power in the interaction with the agent, all incentive-compatible information intermediation mechanisms are uninformative about the agent's type.

[Benchmarks in Search Markets](#) (with D. Duffie and H. Zhu), forthcoming at *Journal of Finance*

We characterize the price-transparency role of benchmarks in over-the-counter markets. A benchmark can, under conditions, raise social surplus by increasing the volume of beneficial trade, facilitating more efficient matching between dealers and customers, and reducing search costs. Although the market transparency promoted by benchmarks reduces dealers' profit margins, dealers may nonetheless introduce a benchmark to encourage greater market participation by investors. Low-cost dealers may also introduce a benchmark to increase their market share relative to high-cost dealers. We construct a revelation mechanism that maximizes welfare subject to search frictions, and show conditions under which it coincides with announcing the benchmark.

[Deferred Acceptance with Compensation Chains](#), abstract published at the *EC'16* conference

I introduce a class of algorithms called Deferred Acceptance with Compensation Chains (DACC). DACC algorithms generalize the DA algorithms by Gale and Shapley (1962) by allowing both sides of the market to make offers. The main result is a characterization of the set of stable matchings: a matching is stable if and only if it is the outcome of a DACC algorithm.
Best Paper with Student Lead Author award at the EC'16 conference.

[The Effects of Post-Auction Bargaining between Bidders](#)

I study an auction model in which the auction is followed by bargaining between bidders. Bidders with multi-unit demand bid for an object and then bargain over additional units. In the presence of post-auction interaction between players, equilibrium bidding strategies are sensitive to the amount and nature of information about bidders' valuations revealed by the auction. Standard auctions fail to allocate the good efficiently if some bids are announced. If the post-auction market is small enough, a first-price sealed-bid auction with no revelation of bids achieves efficiency. By choosing an optimal announcement policy the auctioneer can increase expected revenue.
An additional award in the Best Paper Prize for Young Economists category at the WIEM'15 conference

[The Simple Economics of Optimal Persuasion](#) (with G. Martini)

We study Bayesian Persuasion problems in which the Sender's preferences depend only on the posterior mean. In this environment, the economics of optimal persuasion are simple. The Sender faces a consumer-like choice problem: given prices, she purchases posterior means using the prior distribution as her endowment. We propose a verification tool for optimality and characterize the structure of prices that support the optimal solution. Two examples illustrate the method's applicability to complex persuasion problems. The approach also yields a necessary and sufficient condition on the Sender's objective function under which the optimal persuasion mechanism can be guaranteed to have a monotone partitional structure.

[Robust Benchmark Design](#) (with D. Duffie)

Recent scandals over the manipulation of LIBOR and foreign exchange benchmarks have spurred policy discussions of the appropriate design of financial benchmarks. We solve a version of the problem faced by a financial benchmark administrator. Acting as a mechanism designer, the benchmark administrator constructs a "fixing," meaning an estimator of a market value or reference rate based on transactions or other submission data. The data are generated by agents whose profits depend on the realization of the estimator (the benchmark fixing). Agents can misreport, or trade at distorted prices, in order to manipulate the fixing. We characterize the best linear unbiased benchmark fixing.

[Implementability, Walrasian Equilibria, and Efficient Matchings](#) (with A. L. Zhang), forthcoming at *Economics Letters*

In general screening problems, implementable allocation rules correspond exactly to Walrasian equilibria of an economy in which types are consumers with quasilinear utility and unit demand. Due to the welfare theorems, an allocation rule is implementable if and only if it induces an efficient matching between types and goods.